Edited by
Tarja Tuomisto

THE FINNISH STATUTORY EARNINGS-RELATED PENSION SCHEME FOR THE PRIVATE SECTOR

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PREFACE

The Finnish way of administering and financing the pension system is very distinctive. As it is a rather ambitious task to publish a comprehensive description on the system, no less than 12 Finnish experts have been engaged to explain the characteristic features of the statutory earnings-related pension scheme in this report.

Every country has its own pension system, built up in the course of its political and economic history. This report does not deal with the history of the system, however, but concentrates on the structure of the pension system that has evolved over the past four decades. It thus mainly deals with the technical aspects of pensions.

The report was edited in Finnish by Tarja Tuomisto of the Central Pension Security Institute in co-operation with the authors and commentators. Eija Puttonen was consulted as English terminology expert, and the English translation was made by Barbro Käld of the Central Pension Security Institute. I would like to thank all the authors and the numerous persons involved in the process, and Jouko Janhunen, liaison officer of Varma-Sampo, for his comments.

I hope the report will prove informative as well as useful to its readers.

Helsinki, 17 June 1999

Matti Uimonen
Managing Director
The Central Pension Security Institute

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1 THE FINNISH PENSION SYSTEM

1.1 Introduction

In Finland the statutory pension system consists of the earnings-related pension covering almost all paid work in Finland, and the residence based national pension. The statutory earnings-related pension is a fixed percentage of earnings, and it sets the retirement income according to the income level of the period of employment. The national pension, on the other hand, guarantees a minimum income for persons who are not entitled to a statutory earnings-related pension, or for those whose statutory earnings-related pension is very small. The earnings-related pension reduces the national pension, and above a certain level, a national pension is not paid at all. The qualifying conditions for entitlement to the national and the earnings-related pensions are nearly identical in all other respects except, of course, the employment condition in the earnings-related pension.

The statutory earnings-related pension is made up of all the pensions having accrued from individual contracts of employment and self-employment. The administration of the statutory earnings-related pension scheme in the private sector is decentralised to private pension institutions. Mandatory statutory pension provision can be supplemented by a supplementary pension arranged by the employer, or by an individual voluntary supplementary pension.

The structure of the pension system is often described in terms of pillars. The first pillar usually represents the mandatory statutory pension system and the second pillar stands for employer-based or industry-wide supplementary pensions. The third pillar represents personal pension schemes. By this classification, the statutory earnings-related pension and the national pension together constitute the first pillar of the Finnish pension system. The second pillar primarily consists of supplementary pension voluntarily arranged by the employer, since there are very few comprehensive industry-wide supplementary pension schemes in Finland.

In Finland the employer-based or industry-wide supplementary pension can be a so-called registered supplementary pension or an optional supplementary pension. The registered supplementary pension forms an integrated whole together with the statutory earnings-related pension and the regulations of the Employees' Pensions Act are partly applied to the registered supplementary pension. However, the employer does not have any statutory obligation to arrange this kind of pension provision, and the coverage and conditions of the pension can be determined by the employer within certain limits, or it can be negotiated by the parties in the labour market. Both the second and the third pillars are of minor importance in the Finnish system. One of the reasons for this is that no upper limit (in Finnish marks) is applied to neither the pensionable earnings, nor the amount of pension payable.

1.2 The structure of the statutory earnings-related pension scheme

The statutory earnings-related pension scheme is based on many different acts. In the private sector there are six different pension acts for various groups of employees and self-employed persons. The State, municipalities and the Evangelical-Lutheran Church all have their own pension acts, and there are separate pension regulations for certain other public societies. The Employees' Pensions Act (TEL) is a kind of general act, upon which the other pension acts are largely modelled. TEL is the principal act since it covers nearly half of those insured under the statutory earnings-related pension scheme in Finland.

The pension benefits payable under the statutory earnings-related pension scheme cover social risks related to old age, disability, long-term unemployment of ageing workers and death of the family earner. The provisions governing determination of pension and qualifying conditions for entitlement to pension are so co-ordinated in the acts on earnings-related pension of the private and public sectors that the pension from different employment and self-employment periods constitutes an integrated whole. This co-ordination is most complete in the private sector, where, despite the decentralised administrative system, pensions are granted and paid by one single pension institution.

Figure 1 shows the basic idea of the determination of a statutory earnings-related pension. The final pension to be paid to the insured person consists of pensions accrued in periods of employment and self-employment under different pension acts. The combination of letters in the figure are abbreviations of the names of the pension acts in Finnish. The complete names of the private and public-sector pension acts are found in section 1.5.

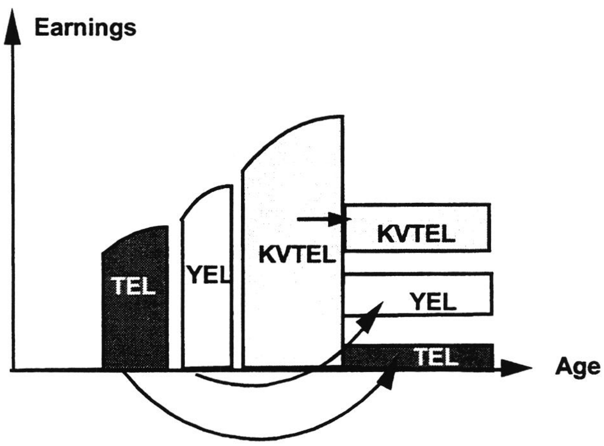


Figure 1. The principle for determination of the total pension

The earnings-related pension benefits are mainly co-ordinated according to the following principles, covering the pension acts for both employed and self-employed persons:

- Every employment contract and all periods of self-employment add to the pension (the earnings principle).

- The accrued pension right is vested, even if there is a change of employer or the person in question stops working altogether (the vesting principle).

- The statutory earnings-related pension is index-linked. The index adjustments are in line with the average changes in the wage and price levels. Adjustments are made annually both during the pension accrual period and after retirement.

- The disability pension is projected to retirement age if the disability occurs when the person in question is employed, or within a year of the termination of the employment contract (the fully-effective pension).

- There are no upper limits in Finnish marks for the pension or the pensionable earnings (no pension ceiling).

- The maximum amount of the statutory earnings-related pension is limited to a certain percentage of earnings. This is done by integration of the pensions accrued under different systems. The maximum amount of the statutory earnings-related pension is 60 per cent of the highest pensionable earnings. When integrating the pensions, the benefits under the statutory employment accident insurance, the statutory third party liability motor insurance and the military injuries legislation are also taken into account. They take priority over the statutory earnings-related pensions, so a statutory earnings-related pension becomes payable only to the extent that it exceeds these benefits.

1.3 The development of the statutory earnings-related pension scheme

The statutory earnings-related pension scheme was once founded in co-operation with the labour market organisations and it has been developed over the years with their assistance.

Before the statutory earnings-related pension scheme was introduced, the employees in the private sector (excluding seamen) were covered through flat-rate and means-tested national pensions, employment accident insurance, the obligations under the social assistance legislation concerning support of ageing employees, voluntary individual or group life assurance arranged by the employer, voluntary arrangements in company pension funds and industry-wide pension funds and pensions paid directly by the employer. Before the inception of the statutory earnings-related pension scheme, voluntary pension arrangements covered less than 20 per cent of employees, mostly clerical workers. In industry pensions amounted to about 2 per cent of wages and salaries for working hours.

The seamen got their own pension act (MEL) before the other employees as early as in 1956. Due to the character of the seamen's work, this pension act partly differs from later pension acts. The financing of the pensions is also different.

The current statutory earnings-related pension scheme for the private sector started with the passing of two pension acts which came into force on 1 July 1962. The above-mentioned general principles of co-ordination were regulated by the Employees' Pensions Act (TEL). However, it covered only employment contracts that had lasted for at least six months. The TEL Pension Act was supplemented by the Temporary Employees' Pensions Act (LEL) restricted to certain branches. The same principles of co-ordination were also gradually introduced in the other acts on earnings-related pensions.

Most persons employed by the State and municipalities already belonged to a statutory pension scheme, but in the 1960s it was found that this partly did not reflect development in society. The pension legislation of the public sector was reformed in the 1960s along the lines of the acts on earnings-related pensions for the private sector. Self-employed persons have been covered by the acts on earnings-related pension from the beginning of 1970 when The Farmers' Pensions Act (MYEL) and The Self-Employed Persons' Pensions Act (YEL) were enacted. The last of the six pension acts for the private sector is The Pension Act for Performing Artists and Certain Other Employee Groups (TaEL), which applies to different professions specified in the Act and to TEL employment contracts lasting for less than a month. The Act came into force in 1986 and amendments concerning short employment contracts under TEL were made at the beginning of 1998.

The scope of pension coverage for employees in the private sector has gradually been expanded so that at the moment virtually all kinds of work entitle the employee to a statutory earnings-related pension (see section 2.1). Originally, statutory earnings-related pension started to accrue for employees working in TEL branches when the employment contract had lasted for six months. In 1965 this waiting period was shortened to four months, and since 1971 pensions have accrued after employment of one month's duration. From the beginning of 1998, TEL employment of less than one month's duration is also insured under TaEL. In the LEL branches and in employment contracts under TaEL, the pension right is not based on the duration of the employment contract, but on earnings. The earnings-related pension for self-employed persons starts to accrue after four months of self-employment.

There have never been any upper or lower limits in Finland for pensionable earnings or the amount of pensions. In the Self-Employed Persons' Pensions Act, however, a fairly high ceiling (FIM 463,197 a year in 1998) has been imposed on income.

In the private sector, a full earnings-related pension accrues in about 40 years. Until July 1975, pensions accrued at the rate of one per cent of earnings a year, and the target level of a full pension was 42 per cent of the wage, due to the fact that an old-age pension only accrues between the ages 23 and 65. Since then, pensions have accrued at the rate of 1.5 per cent of the wage a year and, until 1993, the target level has been 60 per cent of the wage. From 1993, the maximum pension level has been 60 per cent of the earnings, reduced by the employee's own share of the contribution.

According to the principal rule, the accrual rate is 1.5 per cent a year of the wage, reduced by the employee's own contribution, but there are a few exceptions to the main rule. From 1994, pensions are accrued at the rate of 2.5 per cent a year for those over 60 who continue working. In 1996, the accrual rate for disability, unemployment and survivors' pensions, calculated on the post-contingency period, was dropped to 1.2 per cent between ages 50 - 60 and 0.8 per cent from ages 60-65. This means that a person becoming disabled at 50 will not get a full pension determined as 60 per cent of the total pensionable wage (i.e. realised pensionable wage plus post contingency, or estimated future wage), but only 53.5 per cent.

At the time when the scheme was first introduced, the pension rate was raised so that a pension based on the so-called minimum percentage was 29-38 per cent of the wage. Nowadays, there are no minimum levels like these, since the scheme has been applied for so long that all retirees have been able to accrue a better statutory earnings-related pension than the earlier minimum level.

In 1962, only old-age and disability pensions were paid. Since then, pension benefits have become diversified, and their amounts have considerably changed. A survivors' pension was linked to the pension benefits in 1967, and the unemployment pension and partial disability pension were included at the beginning of the 1970s. At the end of the 1980s, the early old-age pension, the part-time pension, and the individual early retirement pension as an extension of the disability pension, were introduced. The pensions are dealt with in detail in Chapter 3.

Figure 2 shows a time series of the development of the entire statutory pension system in the years 1960-1997. The figure shows that the proportion of the pension expenditure of the gross domestic product has risen from below 4 per cent to about 14 per cent.

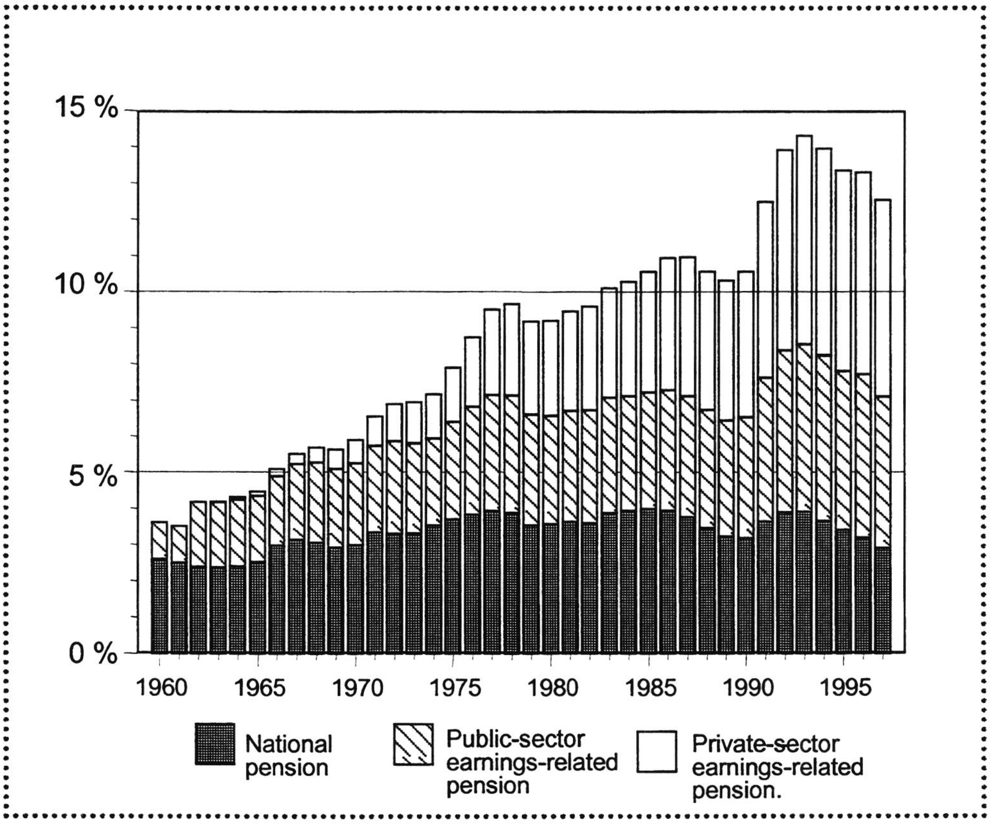


Figure 2. Statutory pension expenditure in per cent of GDP in 1960-1997

1.4 Statutory earnings-related pensions and national pensions

1.4.1 The national pension

The purpose of the national pension scheme is to guarantee a minimum pension for those pensioners resident in Finland whose statutory earnings-related pension is small due to a short history of employment or low income level, or for persons who are not entitled to any earnings-related pension at all. Administration of the national pension system is the responsibility of the Social Insurance Institution (KELA) which is under the supervision of Parliament.

The benefits under the scheme are the national pension and the general survivors' pension paid to widows, widowers and children. Housing allowance, pensioner's care allowance, war veteran's supplement, and the additional veteran's supplement (for those veterans who have been granted a veteran's badge) can be paid in addition to the national pension. Housing allowance can also be paid to the widow or widower in connection with the survivors' pension.

The national pension and the general survivors' pension encompass the same kinds of benefits as the statutory earnings-related pension scheme, i.e. old-age, disability and unemployment pensions, surviving spouse's pension and orphan's pension. The qualifying conditions for statutory earnings-related pension and national pension are fairly identical, disregarding, of course, the employment condition required for earnings-related pensions as opposed to a residence condition in the national pension. Partial disability and part-time pension are not however part of the benefits of the national pension scheme, and the general survivors' pension is only paid to a widow or widower under 65 who does not receive a national pension. Until 1995, the basic amount of the national pension was paid to all entitled, regardless of the amount of the statutory earnings-related pension. From 1996, a national pension is no longer paid to new retirees if the statutory earnings-related pension exceeds a certain amount. The reform also affects those who had already retired when the reform came into effect. Some of these may have been entitled only to the basic amount of the national pension due to the relatively big amount of their statutory earnings-related pension. The basic amount of the national pension, formerly payable to all pensioners over 65 years of age, will be gradually reduced year by year, until it is finally abolished in 2001.

Nowadays, about 95 per cent of the recipients of old-age, disability and unemployment pensions in the private sector are still granted a pension under the national pension scheme. In the future this proportion will be smaller. About eight per cent of those receiving a surviving spouse's pension under the statutory earnings-related pension scheme of the private sector also draw a surviving spouse's pension under the national pension scheme. The corresponding share for orphan's pensions is 86 per cent.

Figure 3 illustrates the national pension in proportion to the amount of statutory earnings-related pension in 1998. The figure portrays the situation of a childless single pensioner, who lives in a municipality belonging to the second or cheaper municipality group. A pensioner who is receiving no or a low statutory earnings-related pension, will get a full national pension. If the statutory earnings-related pension is at least about FIM 5,000 a month, the pensioner is no longer entitled to a national pension. Figure 3 also shows the amount of housing allowance payable under the national pension scheme, when the housing costs have been supposed to correspond to the average recognisable amount of FIM 1,200 a month. In addition, a pensioner may also receive some other supplement. The amounts in Finnish marks 1998 are presented in the text box.

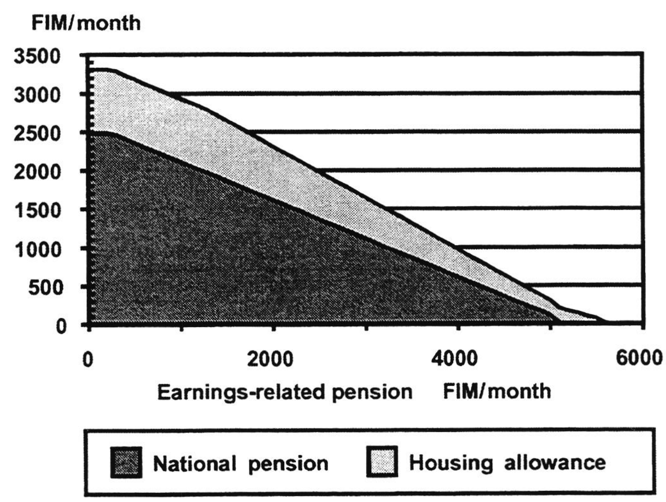


Figure 3. Amount of the national pension in proportion to amount of the earnings-related pension

Amounts of national pension benefits in 1998

The full amount of the national pension for a single person is FIM 2,481 or 2,591 a month, depending on the municipality of residence. The full amount of the national pension for a married person is FIM 2,178 or FIM 2,272 a month, depending on the municipality of residence.

The national pension is reduced by one-half of the amount exceeding FIM 249 a month of the pension based on employment contracts. A national pension is not paid to a single pensioner whose statutory earnings-related pension exceeds FIM 5,090 or FIM 5,311 a month, depending on the municipality of residence. A married person does not receive a national pension if his or her statutory earnings-related pension exceeds FIM 4,484 or FIM 4,672 a month.

The war veteran's supplement is payable to persons who have served as soldiers or in other capacities on the front line during war time. Its amount is FIM 221 a month. In addition, pensioners entitled to a war veteran's supplement who receive a basic small pension, also receive an additional war veteran's supplement up to a maximum of FIM 534 a month.

The housing allowance is 85 per cent of the housing costs exceeding the pensioner's percentage excess. The percentage excess depends on the total earnings of the pensioner and the earnings of his or her spouse. Part of the value of the property exceeding the set limit is also considered as income. A dwelling which is used by the pensioner himself is not considered property, however.

A pensioner's care allowance is FIM 278–1,382 a month depending on the need for assistance.

The full amount of the surviving spouse's pension is the maximum amount of the full national pension. The pension is also reduced by types of income other than the statutory earnings-related pension.

The full amount of an orphan's pension paid to a half-orphan is FIM 627 a month. The amount of a full-orphan's pension is double.

All benefits and earnings limits of the national pension scheme are linked to the consumer price index. Index adjustments are made annually in January. For example, during the past ten years the index for national pensions has risen by an annual average of 2.8 per cent. During this period, the TEL index used in the statutory earnings-related pension scheme has risen by an annual average of 3.3 per cent.

Once the benefit of the national pensions scheme has been determined, it is not recalculated even if there are index adjustments of the statutory earnings-related pension. The amount in payment is only adjusted by the national pension index.

1.4.2 The target level of the total pension

The statutory earnings-related pension in the private sector is proportional to the earnings of the insured person in question. On the one hand, this proportion depends on the length of the work history within the scope of the scheme. On the other hand, it depends on the legal state of the pension scheme at the particular moment when the pension in question started, in other words according to what determination rules it was calculated.

Under the present legislation an insured employee's target pension determined according to a full working career will amount to about 60 per cent of pensionable wage by the turn of the century. Full pension accrues in about 40 years. Those self-employed persons who retire at the end of next decade, will receive the 60 per cent target pension.

Figure 4 shows the combined amount of the target pension (60 per cent of wages) in the private-sector statutory earnings-related pension scheme, and the pension according to the present national pension scheme.

When determining the pension from the national pensions scheme, the same rules apply to a voluntary supplementary pension based on employment contracts or self-employment as to a statutory earnings-related pension. Thus, the figure also shows the pension for such an employee or self-employed person whose pension level has been raised to the target by means of a voluntary supplementary pension.

In the figure, housing allowance has been added to the pension benefits from the national pension scheme, calculated as monthly housing costs of FIM 1,200. The national pension has been calculated presupposing that the pensioner is single and lives in the second or cheaper municipal group. In the future, the pension accrued after a full employment history (40 years) will, in a vast majority of cases, consist almost only of earnings-related pensions. A national pension may be payable if the employment history includes periods outside employment or periods of part-time work, or if the wage is smaller than average.

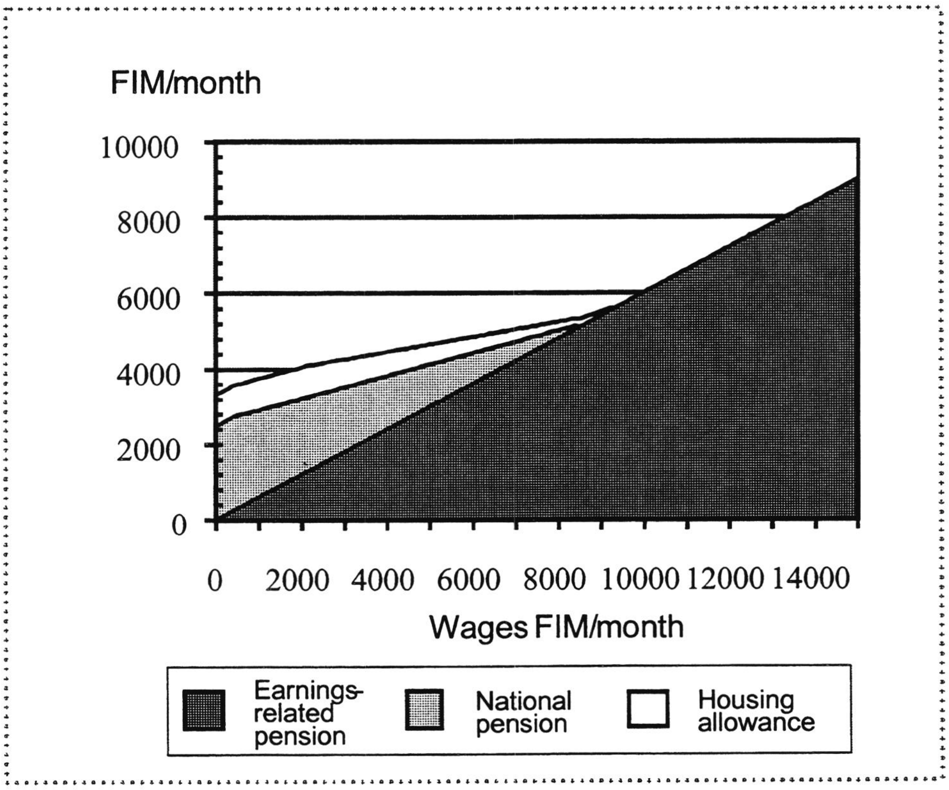


Figure 4. The integrated pension total 1998

Figure 5 shows the targeted pension (60 per cent of the wages) in the statutory earnings-related pension scheme of the private sector, and the size of pension based on the present national pension in relation to the wage of the person concerned (1998). The amount of the pension is the same as in the previous figure, although housing allowance is not included. The figure shows both the gross and net amounts of the relation between pensions and wages.

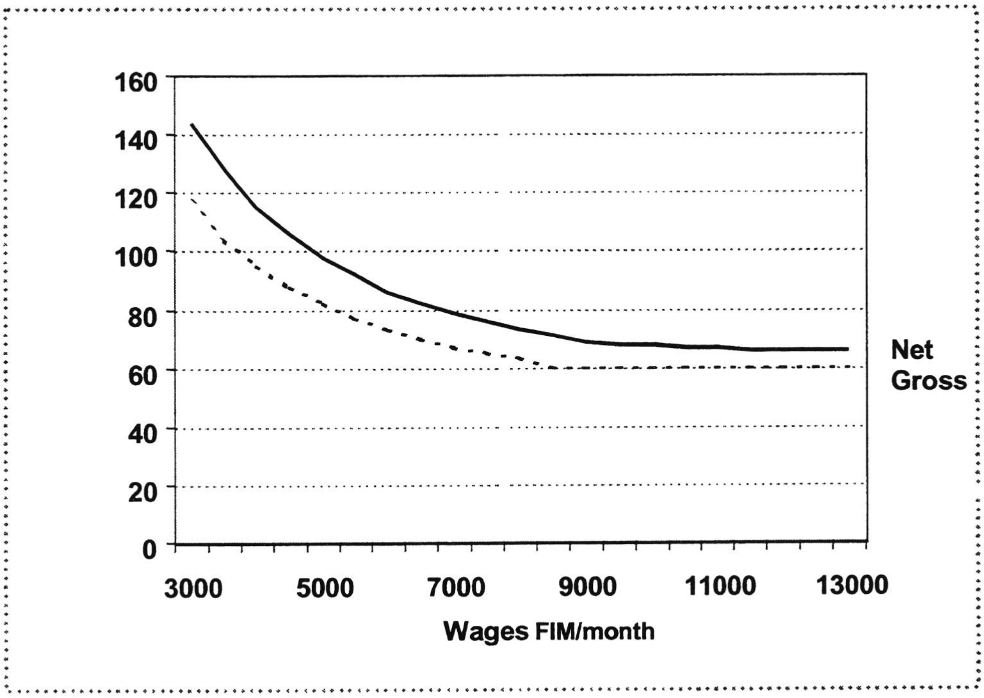


Figure 5. Proportion of the combined amount of the earnings-related pension and national pension of wages

1.5 Administration of the statutory earnings-related pension scheme

A notable characteristic of the Finnish social insurance system and the insurance market is that statutory earnings-related pension insurance and work accident insurance, which come under statutory social insurance, are run by private insurance companies. Since the administration of the statutory earnings-related pension scheme is decentralised to several pensions institutions, some functions are centralised in the central body for the statutory earnings-related pensions scheme, the Central Pension Security Institute. Such functions include maintenance of a central register, division of liability for pension expenditure between the various pension institutions, interpretation of legislation, compiling statistics, and tasks related to the development of the statutory earnings-related pension system.

The Ministry of Social Affairs and Health is in charge of the drafting of legislation for the statutory earnings-related pension scheme.[1] It also confirms the bases of premiums and financial bases. Single earnings-related pension institutions are supervised by the Insurance Supervision Authority. Since no insurance supervision can fully prevent insurance companies in liquidation from becoming insolvent, a statutory, collective (i.e. including all pension institutions and funds) guarantee system has been created for statutory earnings-related pension insurance handled by private pension institutions in order to safeguard the benefits of the insured. If an institution cannot meet its liabilities, other institutions, and ultimately the policyholders will be jointly and severally liable for the payment of the pensions.

Under the TEL Pension Act an employer is free to choose in which pension institution he wants to take out his statutory earnings-related pension insurance. He can choose between the existing six pension insurance companies, which have obtained authorisation from the Council of State for managing statutory earnings-related pension insurance, or a pension fund. When Finland joined the European Economic Area, EEA, in 1994 and the EU in 1995, amendments were made in the legislation so that insurance companies that administer statutory earnings-related pension insurance may not engage in any other insurance business.

There are both pension funds run by a single employer, i.e. company pension funds, and pension funds for one particular industry, i.e. industry-wide pension funds. In order to establish a company pension fund or an industry-wide pension fund, there must be at least 300 insured members. At the end of 1997, there were 42 company pension funds and eight industry-wide pension funds. At the end of 1997, 83 per cent of the TEL-insured were insured in a pension insurance company, 14 per cent in a company pension fund, and 3 per cent in an industry-wide pension fund.

By the end of 1997, TEL pension reserve funds amounted to FIM 180 billion. Of these, 81 per cent were administered by insurance companies, 15 per cent by company pension funds and 4 per cent by industry-wide pension funds.

The pensions for employees under the LEL, TaEL and MEL pension acts and the farmers' pensions under MYEL are administered in separate

1 See Chapter 7. The regulation, steering and supervision of pension schemes

pension institutions. Self-employed persons under the Self-Employed Persons' Pensions Act arrange their private statutory earnings-related pension in a pension insurance company (98 per cent of the self-employed) or in an industry-wide pension fund (two per cent).

Figure 6 shows the administrative organisation of the Finnish statutory earnings-related pension scheme separately for both the private and the public sector. Below the figure there is a list of the acts on earnings-related pension. As was mentioned before, the statutory earnings-related pension system was created in co-operation with the labour market organisations. Therefore, the labour market organisations are represented in the administrative bodies of the pension institutions and the Central Pension Security Institute.

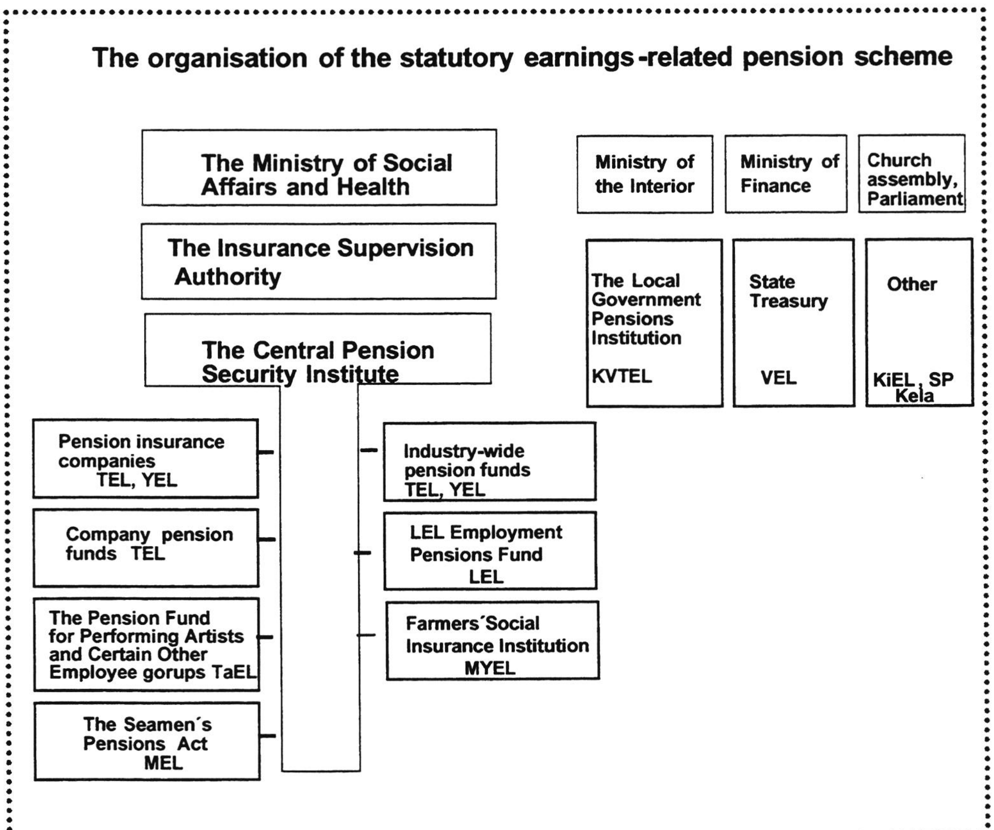


Figure 6. Administration of statutory earnings-related pensions in the private and public sector

Private-sector pension acts:

TEL	=	Employees' Pensions Act
LEL	=	Temporary Employees' Pensions Act
TaEL	=	Pension Act for Performing Artists and Certain Other Employee Groups
MEL	=	Seamen's Pensions Act
MYEL	=	Farmers' Pensions Act
YEL	=	Self-Employed Persons' Pensions Act

Public-sector pension acts:

VEL	=	State Employees' Pensions Act
KVTEL	=	Local Government Employees' Pensions Act
KiEL	=	Evangelical-Lutheran Church Pensions Act

The pension institutions of the private sector are independent insurance institutions. The contributions and insurance terms and conditions are the same for all, however, and have been approved by the Ministry of Social Affairs and Health.

In the private sector, a pension is granted and paid by the pension institution where the person was last insured (the last institution principle). Besides its own data registers, the pension institution obtains data from the Central Pension Security Institute for calculation of pensions. The registers also contain a reference to employment contracts in the public sector, if any. The Central Pension Security Institute annually settles the liabilities of the different pension institutions for the pensions paid. Within the next few years, the last institution principle will also be extended to the pension institutions of the public sector.

The central registers also make it possible to provide services for insured persons before pension contingency. Each year, about every tenth insured person automatically receives a written pension record with data on registered employment contracts and accrued pensions. In this way the insured person can make sure that his pension record is correct. Furthermore, he can check his pension record whenever he wishes.

1.6 Financing the statutory earnings-related pensions

Employers and insured wage-earners together finance statutory earnings-related pensions of basic level for wage-earners in the private sector. Insured wage-earners can also contribute towards their voluntary supplementary pension, together with the employers.

The State participates in the financing of earnings-related pensions for farmers and other self-employed persons to the extent that the financing through contributions is not sufficient.

The financing of pensions under the Seamen's Pensions Act differs from other statutory earnings-related pensions in that the employers, the insured and the State have an equal share in financing pension expenditure.

The statutory earnings-related pensions of wage earners in the private sector are financed through a partly funded pension scheme. The contributions are fixed according to actuarial principles laid down by law, and the contribution is basically a collective arrangement where liabilities are shared between employers. The Ministry of Social Affairs and Health annually confirms the rate of contributions. Exceptions from the prescribed level of contributions can be accepted only through amendments of law, through a change of benefits, or by allowing a temporary liabilities deficit.

Throughout the 1960s, the rate of contribution was five per cent. It exceeded ten per cent in 1976, and 20 per cent in 1995. As a result of the gradual maturation of the statutory earnings-related pension scheme, the rate of contribution will rise slowly for a very long period of time.

The financing of the statutory earnings-related pension scheme is discussed in detail in Chapter 4, and the financing prospects in Chapter 8.

2 SCOPE AND COVERAGE OF THE ACTS ON EARNINGS-RELATED PENSION

The acts on earnings-related pension cover almost all employees and self-employed persons. The number of persons insured under the acts in the private sector is about 70 per cent of the nation's total labour force. Of those insured, 80 per cent are employees, and 20 per cent self-employed persons.

2.1 Qualifying conditions for coverage by the pension acts

The statutory earnings-related pension scheme for the private sector covers nearly everybody who is, or has been, working in the private sector. In 1997 there were about 1,690,000 persons working in the private sector. Only a small number of them were left outside the statutory earnings-related pension scheme, because the limits concerning duration of employment and earnings are very low. About 760,000 persons have accrued a pension in the private sector, but have switched over to the public sector, moved abroad, or are for some reason not part of the labour force. Their accrued pension rights are preserved as paid-up pensions.

The Employees' Pensions Act (TEL) covers employees aged 14–64, whose employment contract has been uninterrupted for at least a month, and who earn at least as much as the amount stated in the Act (FIM 1,156.69 a month in 1998). If TEL employment is of shorter duration than a month, or if the earnings do not amount to the minimum limit, the pension accrued from the employment will be determined according to TaEL.

The Temporary Employees' Pensions Act (LEL) applies to employees working in agriculture, forestry, construction or dock work. Clerical workers in these branches are insured under TEL. There is a minimum limit for the annual pensionable earnings under

LEL, which is FIM 3,650 (1998). If the annual earnings are below this minimum limit, no LEL pension accrues for that year.

The Seamen's Pensions Act (MEL) covers seamen working on Finnish merchant vessels in international transport. Seamen working on coastal or inland water traffic, however, come under LEL.

The Pension Act for performing Artists and Certain other Employee Groups (TaEL) covers the employee groups listed in the Act and the above-mentioned short-term TEL employment. The employment contract should be intended to last for less than a year. There is also a minimum limit for the annual pensionable earnings in TaEL, which is FIM 3,650 (1998).

The Farmers' Pensions Act (MYEL) covers farmers aged 18-64 residing in Finland, as well as family members working on the farm. The farm should comprise at least five hectares of land, and the farmer shall work on the farm himself. When determining the size of the farm, a proportional area of forest is taken into account as agricultural land, depending on the municipality of residence. For eligibility under MYEL, the farmer shall have pursued farming for a minimum of four months after the age of 18, and the annual farming income shall be at least FIM 13,880.28 (1998). The Farmers' Pensions Act also covers fishermen who pursue professional fishing without having an employment contract, and reindeer-owners who carry out reindeer husbandry for their own purposes, or on account of their own family members or a reindeer owners' association.

Farmers' early retirement aid is paid to support the structural changes in agriculture. It may be granted to a person 55-64 years old, who has been a full-time farmer for ten years before handing over the farm, and who does not receive a MYEL pension or a national pension. Land can be sold or rented to a younger farmer for full-time farming or for non-agricultural purposes. The Self Employed Persons' Pensions Act (YEL) covers self-employed persons, other than farmers, residing in Finland. The person should be 18-64 years of age, self-employment should continue at least for four months after the person has reached the age of 18, and the income should be at least FIM 2,313.38 a month (1998).

The following table is a summary of the number of persons insured under the private-sector acts on earnings-related pension at the end of 1997.

Pension act	Persons
Employees:	
TEL	1 028 000
LEL	78 000
MEL	8 000
TaEL	7 000
Self-employed:	
YEL	154 000
MYEL	122 000

The full names of the pension acts in the table are listed in section 1.5.

2.2 Insured employees and self-employed persons

About 70 per cent of all the nation's employees work in the private sector. Eighty per cent of these are employed, and 20 per cent are self-employed.

Figure 7 contains information about employees, self-employed persons and pensioners covered by the statutory earnings-related pensions scheme in the private sector in 1996 by age and sex. The women's share is somewhat smaller than that of men, because more women than men work in the public sector, and more women than men are outside the labour force. The participation of women in working life in Finland, is, however, above the average in OECD countries.

Looking at the private and public sector as a whole, only one out of every three people between 55 and 64 works, and every second person in this age group is retired. Furthermore, the labour force rate of men over 55 is among the lowest of all OECD countries.

Figure 7. Population and coverage of statutory earnings-related pensions in the private sector in 1996

The three largest industries in the private sector are manufacturing, trade, accommodation and restaurant services, and finance, insurance and business. More than 90 per cent of the total workforce in these branches of industry works in the private sector. Table 1 shows data on the private-sector employees by industry, and their share of the total labour force in 1996.

Table 1. Employed persons in the private sector by industry in 1996, %

Industry	Breakdown by industry, %	Share of the employed workforce in the industry, %
All branches of industry	100	71
Agriculture and forestry	9	92
Manufacturing	30	98
Construction	7	84
Trade, hotels and restaurants	21	99
Transport and communications	10	93
Finance, insurance and business services	12	79
Community, social and personal services	10	23

Source: Statistics Finland

Table 2 contains information about the number of employees in the private sector by industry, and the distribution of all employees between these sectors. The table also shows the number of self-employed persons by industry. Most self-employed work is in agriculture, forestry or fishing. Thirty-six per cent of the self-employed belong to this occupational group. More than 70 per cent of all persons working in this sector are self-employed.

Sixty-six per cent of all wage-earners work in the private sector. Commercial and industrial work, mining and construction, and transport and communications work almost entirely fall in the private sector. Health care and social welfare, on the other hand, are mostly handled in the public sector.

Table 2. Employees and self-employed persons in the private sector by professional field, 1996.

Professional field	Employees		Self-employed persons
	Number of employees in the private sector	% of all employees	Number
All occupations	1 179 000	66	302 000
Technical, scientific, educational, hum. work, etc	152 000	49	18 000
Health care and social work	45 000	17	13 000
Managerial, administrative and clerical work	211 000	70	42 00
Commercial work	66 000	100	37 000
Agricultural and forestry work	26 000	63	109 000
Transport and communications work	86 000	89	20 000
Manufacturing industry, construction and mining	362 000	91	41 000
Provision of services	124 000	59	21 000
Not specified	8 000	64	1 000

Source: Statistics Finland

2.3 Pensions and pension beneficiaries

A beneficiary of a pension may have worked under several pension acts during his or her working career. In the two tables below, the recipients of pensions are grouped according to the pension act under which they have last been insured, and according to which the pension has been granted. The Seamen's Pensions Act (MEL) is an exception to this rule. MEL pensions that have started before 1 January 1991 are always registered as separate pensions. Data on survivors' pensions have been compiled according to the employment history of the deceased.

The number of pensions being paid is not equal to the total number of earnings-related pension recipients in the private sector. Besides in the MEL statistics, this is also due to the fact that the recipient of a survivors' pension may receive a personal earnings-related pension and also a survivors' pension. The number of beneficiaries of pensions based on own employment including the special pensions for farmers was 870,289 at the end of 1997, and the total number of pension recipients was 962,272, although the total number of pensions is 1,072,392 in the schedule below.

Breakdown of private-sector pensions in payment (under the last pension act) at year-end 1997:

TEL	594 239
LEL	153 053
MEL	8 275
TaEL[2]	674
YEL	85 871
MYEL[3]	230 280
Total	1 072 392

Source: Työeläkejärjestelmän tilastollinen vuosikirja 1997 (Statistical yearbook of the Finnish statutory earnings-related pension scheme 1997), part I

At the end of 1997, the recipients of private-sector pension were divided into the following groups:

Old-age pension	590 648
Disability and unemployment pension	259 965
Part-time pension	2 797
Survivors' pension	226 039
of which widows/widowers	205 656
orphans	20 383
Total	962 272

Source: Suomen työeläkkeen saajat vuonna 1997 (Beneficiaries of earnings-related pension 1997)

2 The number of TaEL pensions is small, since this pension act has only been in force since 1986.

3 In addition, 43,744 special pensions for farmers were paid.

At the end of 1997 the number of disability pensions being paid under the private-sector pension acts was 208,907, and the number of partial disability pensions was 9,067. Of the full pensions, the number of individual early retirement pensions was 41,194.

The total number of recipients of earnings-related pension in the private sector was 77 per cent of all pension recipients in Finland, and 86 per cent of all recipients of earnings-related pension in the private and public sectors. A person who receives a statutory earnings-related pension from the private sector, usually also draws a national pension, and, if his working career also includes work in the public sector, he is also entitled to an earnings-related pension from the public sector.

3 CALCULATION OF STATUTORY EARNINGS-RELATED PENSIONS

Old-age, disability, unemployment, part-time and survivors' pensions are payable under all the acts on earnings-related pension. Farmers can also be granted farmers' early retirement aid. Statutory earnings-related pension accrues at a rate of 1.5 per cent of wages per year of employment, and the maximum pension is 60 per cent of the wage. Pensions in payment are tied to the annually adjusted TEL index, which is calculated separately for those under 65 and those over 65. All income limits in the pension acts have been tied to the index for persons under 65.

3.1 Right to pension

The statutory earnings-related pension benefits in the private sector are old-age pension, early and deferred old-age pension, part-time pension, unemployment pension, disability pension, partial disability pension, cash rehabilitation benefit, surviving spouse's pension, orphan's pension, and farmers' early retirement aid.

Old-age pension is granted to an insured person who has reached the retirement age of 65 years. Furthermore, TEL requires that the employment contract has been terminated. Since the beginning of 1986, persons aged 60-64 have been able to choose an early old-age pension. An early old-age pension remains smaller than a normal old-age pension. On the other hand it is possible to defer the pension past pensionable age, which results in an increment for deferred retirement.

Part-time pension may be granted to persons aged 58-64 with a long work history who do not receive a pension in their own right (i.e. other than survivors' pension), and who shift over from full-time to part-time work. Part-time work must comprise at least 16 and at the most 28 hours a week, and the decrease in income should be 30–65 per cent compared with full-time earnings. The earnings from part-time work must amount to at least FIM 1,156.69 a month (1998). The qualifying age for entitlement to a part-time pension was experimentally lowered to 56 from 1 July 1998, and the experiment will continue until the end of the year 2000.

Unemployment pension is granted to a person aged 60-64, who has been unemployed for a long time, and who has received daily unemployment benefit for the maximum period, i.e. 500 days. Furthermore, it is required that the claimant has been gainfully employed for at least five years during the last 15 years, and that the conditions for projecting the pension to retirement age are fulfilled. Another requirement is that he has not been offered a job which he has refused to accept, and thereby lost his right to daily unemployment benefit.

Disability pension is granted to an insured person under 65 with an illness, defect or injury lowering his working capacity, providing that the disability can be estimated to last uninterruptedly for at least a year. Not only medical factors are taken into account but also the insured person's ability to earn his living from such available work which it is reasonable to expect him to manage in view of his education, earlier work, age and other comparable circumstances. Depending on the decrease in working and earning capacity, the disability pension is paid as either a full or a partial pension. A full disability pension is granted if the working capacity is considered to have decreased by at least three fifths, and a partial disability pension if the working capacity is considered to have decreased by less than three fifths, but at least by two fifths.

Since 1 January 1996, the *cash rehabilitation benefit* has replaced the former temporary disability pension. Entitlement to this benefit requires that the applicant is unable to work as defined for entitlement to a disability pension, and that a treatment or rehabilitation plan has been drawn up for the applicant. The aim is to emphasise measures of rehabilitation which promote the person's return to work, instead of permanent pension decisions.

Since the beginning of 1986, the disability pension has also been paid as *individual early retirement pension.* This pension differs from the ordinary disability pension in that it presupposes a long working career, and that less attention is paid to medical circumstances than in the case of ordinary disability pension. The individual early retirement pension is only granted to persons over 58.

Surviving spouse's pension is paid under the same conditions to widows and widowers. The requirements for entitlement to pension are that the widow or widower was married to the deceased at the time of the deceased person's death, and that they married before the deceased was 65 years. Even a former spouse can be entitled to surviving spouse's pension if the deceased had been liable to pay alimony to the former spouse.

A widow or widower is entitled to the pension if she or he and the spouse had a child together. The age of the child does not affect the right to a surviving spouse's pension. If the spouses did not have a child, entitlement to a surviving spouse's pension requires that the widow or widower was at least 50 years at the death of the deceased. Moreover, the marriage must have been contracted before the widow or widower had reached the age of 50, and it should have lasted for at least five years. If a childless widow or widower was born before 1 July 1950, a lower age limit of 40 years is applied instead of the above-mentioned age limit of 50 years. The marriage must also have lasted for at least three years.

The surviving spouse's pension is not withdrawn if the widow or widower remarries after the age of 50. If a younger widow or widower remarries, the pension is withdrawn, but the widow or widower gets a lump-sum payment equivalent to a surviving spouse's pension of three years. If the new marriage ends within five years without the right to any survivors' pension, payment of the withdrawn survivors' pension will begin again upon application. The amount of the lump-sum payment is then deducted from the pension.

The child's pension right does not depend on the surviving spouse's pension, nor does the income of the child affect the amount of pension. A orphan's pension can be granted to a deceased person's own children under 18 years old. After their stepfather or stepmother, the spouse's children may be entitled to a survivors' pension if they lived in the spouses' shared home at the time of the death of the person through whom the benefit is derived. The orphan's pension is terminated when the child reaches the age of 18, or earlier if he is adopted.

Farmers' early retirement aid may be granted to a farmer aged at least 55 years who gives up his farm and farming permanently. Farmers' early retirement aid may be granted to the owner of the farm, his spouse or widow who has a marital right to the farm. A farmer who rents land for cultivation purposes can also be entitled to the benefit. A wife whose husband is entitled to farmers' early retirement aid, can be entitled to the benefit at the age of 50, but payment of the benefit will not start until the age of 55. If the insured person's employment contract or self-employment under the acts on earnings-related pension ends before the pension contingency, he preserves his accrued statutory earnings-related pension rights as a paid-up pension, which give him entitlement to old-age pension or disability pension or entitle his beneficiaries to survivors' pension. If payment of a fully effective unemployment pension or individual early retirement pension starts within the statutory earnings-related pension scheme for the public sector, the paid-up pension under the private sector also becomes payable. With the exceptions mentioned below, the retirement age for paid-up pensions is 65 years.

The conditions of pension for different employment contracts may vary, for instance as regards the retirement age. When the individual paid-up pensions are combined to form a total statutory earnings-related pension, they are also converted to correspond to the conditions of the last employment contract. If, for instance, the retirement age is then lowered, the paid-up pension is lowered correspondingly, so that the capital value of the paid-up pension is preserved.

If, on the other hand, the retirement age is raised, the paid-up pension will be correspondingly increased. The Ministry of Social Affairs and Health has confirmed common conditions concerning paid-up pensions for all pensions institutions as well as the coefficients by which the pensions are converted.

All statutory earnings-related pensions are paid as continuous payments. However, in certain cases, monthly pensions that do not exceed FIM 32.13 (1998), can be paid as lump sums.

3.2 Calculation of pensions

The old-age, unemployment, full disability, individual early retirement pension, cash rehabilitation benefit and full survivors' pension represent a certain percentage of pensionable earnings or income. According to the principal rule, pension accrues at the rate of 1.5 per cent of the wage for each year in work. Work after the age of 60, however, will generate a pension accrual rate of 2.5 per cent a year. The accrual rate for the post-contingency period in a fully effective disability or unemployment pension granted before pensionable age depends on the age of the insured person. Up to the age of 50, pension accrues at the rate of 1.5 per cent, from ages 50 to 60 at the rate of 1.2 per cent, and from 60 to 65 at the rate of 0.8 per cent of the annual pensionable earnings.

The maximum pension is 60 per cent of the highest pensionable wage. The pensionable wage and the corresponding pension increment is calculated separately for each employment contract and period of self-employment, and the separate pensions are thus combined into one pension.

The amount of the *early old age pension* is determined according to the employment periods completed before the time of commencement of the pension. Furthermore, the pension is reduced by 0.5 per cent for each month the pension is taken early (before the age of 65).

The amount of *part-time pension* is 50 per cent of the difference between full-time and part-time earnings, but not more than 75 per cent of the old-age pension accrued before the part-time pension started.

The partial disability pension is half of the full disability pension.

The survivors' pension is based on the deceased person's old-age, early old-age, full disability, individual early retirement pension or unemployment pension. If the deceased person was not retired at the time of death, or received a partial disability or part-time pension, the survivors' pension is based on the pension he would have received had he become disabled on the date of his death.

The total amount of the surviving spouse's pension and the orphan's pension is calculated on the pension of the deceased as follows:

	Number of children				
	No children	1	2	3	4- children
Spouse's pension proportion of the deceased person's pension	6/12	6/12	5/12	3/12	2/12
Proportion of orphan's pensions of the deceased person's pension	-	4/12	7/12	9/12	10/12

The surviving spouse's pension is intended to compensate for the loss in the widow's or widower's income due to the death. Both spouses' accrued earnings-related pensions are taken as a basis for determining the final amount of pension payable to the widow or widower. The amount of surviving spouse's pension is reduced by the widow's or widower's own statutory earnings-related pension through pension adjustment if it exceeds a certain limit in Finnish marks. The total amount of survivors' pension (the surviving spouse's pension and the orphan's pension together), cannot exceed the pension of the deceased.

If a recipient of old-age, early old-age, unemployment, disability or individual early retirement pension was born before 1939 (recipients of TEL, LEL and TaEL pensions), or before 1947 (recipients of YEL and MYEL pensions), and the beneficiary or his spouse are the guardians of a child under 18 years who would be entitled to a survivors' pension, a child increase is added to the pension. The child increase is 1–20 per cent per child depending on the pension recipient's year of birth.

3.3 Index linkage

The statutory earnings-related pensions and the pension rights on which they rest are linked to the TEL index which is annually confirmed by the Ministry of Social Affairs and Health.

Since 1996 two indices have been used: one for persons of working age under 65, and one for those over 65. The pensions in payment are adjusted annually in January in line with the index increase.

Since the beginning of 1977, changes in both the price and wage levels have been considered. Before 1977, the TEL index followed the average increase in wages. Until 1995, the statutory earnings-related pensions index was the same for all pension recipients and the basis for determination corresponded to the present index for those of working age.

The average of the changes in wages and consumer price indices is taken into consideration in the indices for those of working age, i.e. they both have a weighting of 0.5. In the index for persons of retirement age, price changes carry more weight than changes in wages. The impact of changes in prices is 0.8 and 0.2 for changes in wages. Official index series from Statistics Finland are used as indicators of the wage and price levels as regards wage earners' income level and consumer prices.

The following figure shows the average increase of the TEL index confirmed by the Ministry of Social Affairs and Health in five-year periods in the years 1962–1997 and, in comparison, the corresponding increase in consumer prices.

Year	Increase of the TEL index, %	Average increase in prices, %
1962-1967	8.73	5.90
1967-1972	10.20	5.51
1972-1977	16.23	14.45
1977-1982	9.79	9.68
1982-1987	7.94	5.63
1987-1992	6.55	4.90
1992-1997	0.84 (Persons over 65) 1.26 (Persons under 65)	1.21

The various sums fixed in the acts on earnings-related pension are linked to the TEL index. When a pension is awarded, the wages from earlier years are adjusted according to the TEL index to the level for the year when the pension is awarded. Paid-up pensions from earlier work are also linked to the TEL index.

4 THE FINANCING AND FUNDING OF STATUTORY EARNINGS-RELATED PENSIONS

A special feature of the Finnish statutory earnings-related pension scheme is that pension financing is based partly on a funded pension system, and partly on a pay-as-you-go system. The method for cost clearance is another characteristic feature of the scheme. The funding principle means that part of the contributions collected for financing of pensions is funded to meet future pension expenditure. The system thus prepares for retirement of the "baby-boom" generation around the year 2010. There is a certain component in the collected pension contribution for the funded part of each pension benefit which also constitutes an important actuarial basis for many calculations and predictions within the system.

The EU directives on life assurance govern the investment of pension assets in the statutory earnings-related pension scheme and insurance company investments. The growth of the national economy is especially important in a partly funded system. Thus, the pension assets are invested in objects promoting the growth of production. Previously, this meant granting loans to enterprises. As a result of the changes in the money market, there is no longer a great demand for loan financing, and attempts have been made to change the system so that pension assets would be increasingly invested in, for example, shares.

4.1 General actuarial principles

The principles to be followed in the actuarial technique for the private-sector earnings-related pensions have been prescribed in the Insurance Companies Act, the Act on Earnings-Related Pension Insurance Companiens and the Acts on the earnings-related pension. The pension funds observe the same actuarial principles as the insurance companies, where appropriate.

The Ministry of Social Affairs and Health issues more explicit provisions on the application of the acts and confirms the technical bases for earnings-related pension insurance[4]

Besides the principle of safeguarding the benefits of the insured, another important principle of the Insurance Companies Act is the principle of moderation. According to this, the collected contributions or insurance premium amounts should be reasonable in proportion to the benefits obtained through the insurance. The implementation of the principle of moderation should be flexible and carried out without risking the principle of safeguarding the benefits of the insured so that the contributions are confirmed to be sufficient. Any profits are annually credited to the policyholders in order to keep the net price of the insurance on a reasonable level.

Advance confirmation by the Ministry of Social Affairs and Health must annually be applied for the contribution rates. In this respect, the TEL insurance differs from the principle of the abolition of prior approval according to the EU directives. Insurance companies are obliged to compile statistics which can serve as a basis for determining contributions, and to follow the cost-effectiveness of their business.

Solvency of insurance companies has been dealt with in various rules and regulations related to the investment and registration of assets, technical provisions, audit, the merging of insurance companies, transfer of the insurance portfolio, and the safeguarding of the interests of the insured.

The solvency is measured by a newly defined solvency margin (the term used is "toimintapääoma", operating capital), which besides the company's own book capital, also includes the difference between the fair value of the assets and the book value of assets, and some voluntary reservations.

This part of the company assets may thus be used to cover investment losses, and its minimum amount has been defined by law. The interests of the insured are also safeguarded by the provision allowing the

4 Described in detail in Chapter 7. The regulation, steering and supervision of pension schemes

Insurance Supervision Authority to take possession of company assets in order to guarantee the claims of the insured if they are at risk due to insolvency. The regulations were last revised in connection with the adjustment of the insurance legislation to the EU legislation, and with the legislative amendments in 1997 concerning the solvency rules for pension institutions and the administration of insurance companies handling statutory earnings-related pension insurance. The amendments were needed due to changes in the investment environment, and the drop in the general interest level. The minimum amount of the solvency margin was raised significantly, and it was made dependent on the company's investment distribution. The mechanisms for supervision of solvency were reformed, and an alarm system based on risk theoretical analyses was introduced. After the reform it will be possible, if necessary, to interfere with a company's activities earlier than before, and thus the benefits of the insured can be better secured. Moreover, it was prescribed how the net assets of a pension company should be shared between the owners and the insured, and how the representation of the policyholders and the insured should be arranged in the governing bodies of the company. The above mentioned solvency rules also normally apply to pension funds.

Pension funds handling TEL statutory earnings-related pension insurance differ from insurance companies since these funds are smaller, and their investment activities reflect the needs of individual employers to a greater extent.

4.2 Contributions within the statutory TEL pension system

The employers and employees together finance pensions within the Finnish earnings- related pension system (TEL basic security). The employees' pension contribution was introduced in 1993. Before this, the employers paid the whole contribution. All future changes in the contribution rates are divided between the employers and the employees; if the total increase in the contribution rate is planned to be 0.8 per cent for some year, both the employer and the employee pay 0.4 per cent more. At present the employer pays an average of 16.8 per cent and the employee 4.7 per cent of yearly payroll. After some 30–40 years, the corresponding figures will reach a top level of about 21 per cent and 9 per cent, assuming status quo in pension rules and rather moderate assumptions of economic growth (2 %) and future unemployment (7.5 %).

4.2.1 Main principles of the contribution

As mentioned above, TEL pensions are financed under a partly funded system. During introduction of the pension scheme, this technique has made it possible to keep contributions at a reasonable level compared to a fully funded system. On the other hand, contributions are higher than in a pure pay-as-you-go system.

For actuarial purposes, the contribution is divided into two main components: the pooled component which is used to finance the pension expenditure under the pay-as-you-go system, and the funded components determined according to the insurance principle. The bases of payment are, in principle, the same in all pension institutions.

The average TEL contribution is 21.5 per cent of wages (1998). The employees' share is a fixed 4.7 per cent, and the average share of the employers is 16.8 per cent. The whole contribution is collected from the employers, and the employer collects the employee's contribution from the employee's wages. The different components of the contribution are not separately divided into the employer's and the employee's shares.

The contribution is determined according to the so-called small-employer technique if there are less than 50 employees in the company. The contribution of these employers is independent of the age and sex of the employees, and it nearly corresponds to the average contribution. The contribution of large-scale employers (more than 50 employees) varies from 14.5 to 30.7 per cent (1998), depending on the age and sex of the insured employees (see Figure 8 in section 4.2.8).

During the last ten years, the contribution has risen by an average of 0.66 percentage points a year. The amount of the funded components of the contribution is determined according to the funding principles and the estimated disability experience and other experience. The pooled component of the contribution is so determined that the pension expenditure under the pay-as-you-go system can be financed, and the clearing reserve kept on a stable level.

4.2.2 The TEL method for distribution of liability and the pooled component

An earnings-related pension in payment usually includes both a funded component to be financed from the reserves, and a component to be financed under the pay-as-you-go system. One or several pension institutions, i.e. a pension insurance company, a company pension fund or an industry-wide pension fund, are responsible for the funded component of the pension depending on which pension institutions the employee in question was insured by when working. All the pension components that have not been clearly designated as the responsibility of a certain pension institution, are financed by the pooled component of the contribution and the contribution collected for any period of unemployment. The pay-as-you-go system also comprises a buffer fund which is called the clearing reserve.

The institutions jointly finance the pension component payable under the pay-as-you-go system through the pooling mechanism settling the costs between the institutions. For this purpose, the Central Pension Security Institute settles the liabilities of the pension institutions, and makes a record of the money transfer between them. The costs for old-age pensions are divided between the pension institutions according to the joint amount of the pooled component income and the clearing reserves. The costs for the other pooled pensions are divided in proportion to the premiums written. Besides the TEL pension institutions, the LEL and TaEL and MEL pension institutions use the same pooling mechanism. The proportion of pension financed through the pooling mechanism of different pensions and of total pension expenditure in 1997 was as follows:

Old-age pensions	93 %
Disability pensions	37 %
Unemployment pensions	65 %
Part-time pensions	100 %
Survivors' pensions	100 %
Total basic cover	76 %

The table shows that about 70 per cent of the expenditure on statutory earnings-related pensions is financed under the pay-as-you-go system. The survivors' pensions, self-employed persons' pensions and part-time pensions are paid by the pooled component in full, and thus these pensions are not even partly funded. The formation of the pooled component and the financing of other pensions is described in more detail in the following chapters.

The average pooled component in 1997 was about 12.5 per cent of wages. The contribution depends on the age and sex of the employee, and the size of the employer company. The pooled component of the contribution smoothens out the rather strong age-dependence characteristic of the other components, which also means that the total contribution for elderly employees remains reasonable (see Figure 8 in section 4.2.8).

4.2.3 The old-age pension component

Old-age pensions are funded and old-age pension contributions are collected for insured persons aged 23-54. The funding period thus covers about three quarters of a full working career.

Due to inflation and the effective increase in income level, the funded share of total pension has remained comparatively small. From the beginning of 1997, and mainly due to the formation of new solvency capital as described above, the actuarial details of the funding system were changed in many respects. At present, the annually funded amount corresponds to an old-age pension amounting to 0.5 per cent of the current salary. The purpose is, however, that compensating increments will be added to funded pension components in the future in order to maintain their effective value. The difference between the total interest credited to the reserves (currently 5 per cent), and the technical interest (3 per cent) used in the calculation of the reserves will be used for these increments. The increases in the funded pensions increase their share of the total pension, and will thus reduce the need for a pooled component in the future.

The old-age pension contribution is set so that it is on average sufficient for payment of the accrued pension (0.5 per cent of the wages without index increment) from the age of 65 years until the insured person's death. In addition to the predicted mortality, a central factor concerning funding is the discount rate fixed at three per cent from the year 1997, having previously been five per cent from the beginning of the TEL system. Because of the discounting, for example a 23-year-old woman's old-age pension contribution was about 2.4 per cent of the wages in 1997, whereas that of a 54-year-old woman was about 5.6 per cent. Before the drop in the discount rate from 5 to 3 per cent at the beginning of 1997, the age dependence of the old-age contribution was even stronger than at present, because the impact of the discount rate was highest in the contributions of young people due to the longer interest accrual period.

Since the mortality of women is lower than that of men, the old-age pension contributions for men are on average about 24 per cent lower than those for women. The average contribution for men in 1997 was 2.6 per cent, and for women 3.4 per cent, which gives a total average contribution of 2.9 per cent. Besides age and sex, the mortality basis also takes into account the trend towards higher life expectancy, which implies a slight annual increase in the rate of contributions.

In 1997 the average old-age contribution was 2.9 per cent of wages, i.e. the contribution has been lowered by about one-third through the reform of the funding system. Correspondingly, the pooled component was raised, since the value of funded pensions decreased as a result of the reforms, and interest yield is no longer used for pooled pensions. In practice, the last pension institution pays all the funded old-age pensions, including those accrued in employment insured in other pension institutions. The resulting differences in the real liabilities of the pension institutions are adjusted through the pooling mechanism designed for this purpose.

4.2.4 The disability pension component

Disability pensions are only funded in the year of contingency if the disability occurs when an employment contract is in force, or within a year of its termination.

The funded pension corresponds to the initial amount of the pension, but does not include future index adjustments financed through the clearing reserves, or, in the future, also through interest yield on the reserve funds. The fund is on average sufficient for payment of the funded disability pension, considering an interest rate of three per cent, the level of recovery, mortality, and the closing age for disability pension, which normally is 65. Some disability pensions, however, (the so-called paid-up pensions), are fully financed according to the pay-as-you-go system

The pension institution where the last contract of employment was insured is also responsible for the funding for earlier contracts of employment and the pension institution alone is responsible for the entire funded pension. If an insured employee has last been working for a large-scale employer, this employer is the final payer, whom the pension institution charges for the actual disability pension costs. Such experience rating is fully applied to enterprises with more than 1,000 employees. Enterprises with 50–1,000 employees are partly responsible for disability pensions. For enterprises with less than 50 employees, the pension company is fully responsible for the disability pensions.

The disability pension contributions are proportioned according to age so that they approximately correspond to the disability risk of the age group in question, and the amount transferred to the reserve funds. The contribution increases rather considerably with age, since the risk of disability grows and there is no pre-funding. On the other hand, the contribution clearly starts decreasing near the pensionable age, since provision for payment of disability pension need not be made after the retirement on old-age pension. The average contribution in 1998 was about 3.4 per cent of the wages. The individual early retirement pension is paid from the same disability component and mainly according to the same principles as the ordinary disability pension.

4.2.5 The unemployment pension component

Unemployment pensions are funded according to the same principle as disability pensions. The funded pension is only half of the initial pension, however. There is no funding if the last contract of employment has lasted for less than five years. The time limit has been set in order not to make it more difficult for ageing employees to get jobs. Employers' partial experience rating begins from companies with 50 employees, and becomes full in companies with more than 300 employees.

The average unemployment pension contribution was 0.7 per cent of wages in 1998. The contribution is allocated to the older age groups, i.e. insured persons over 55 years. The contribution was at its height, about 0.9 per cent of wages, during the recession in 1994.

4.2.6 Component for administrative costs, etc.

The average contributions to cover administrative costs and premium losses were on average 1.1 per cent of wages in 1998. The contribution decreases as the size of the employer company grows.

4.2.7 Dividends

The final magnitude of contributions can be calculated only after taking refunded company-wise dividends into account. These amounts, credited to the policyholders a posteriori, are based on the surplus of the pension insurance activity, and are a factor lowering the contribution actually paid. In recent years, the surplus has mainly been created through investments that have yielded more than the calculated interest rate. The average dividends in 1998 are 0.4 per cent of wages. Only insurance companies can give dividends of this kind. The amount of dividends varies by company. The difference compared to pension funds is only formal however, since the profit of pension funds, for example created by good yield on investments, lowers the pension expenditures of their mother companies. Furthermore, profits are fairly similar for pension funds and insurance companies.

4.2.8 Components of the TEL contribution in 1998

The premiums written for compulsory TEL statutory earnings-related pensions were FIM 29,082 million in 1997, which represented 20.5 per cent of the total wage bill of FIM 142 billion in the TEL branches.

Average components of the contribution in 1998:

Old-age pension component	2.9
Disability component	3.4
Unemployment component	0.7
Pooled component	13.4
Administrative costs, etc.	1.1
Credits	-0.4
Total	21.1
Discharge of liabilities deficit	0.4
Total contribution	21.5

The contributions of pension funds are generally determined in the same way as the contributions of large-scale employers.

Figure 8 shows the contribution components of medium and large-scale employers (50 employees) for male employees in 1998. There is no essential difference between the contribution components for men and women.

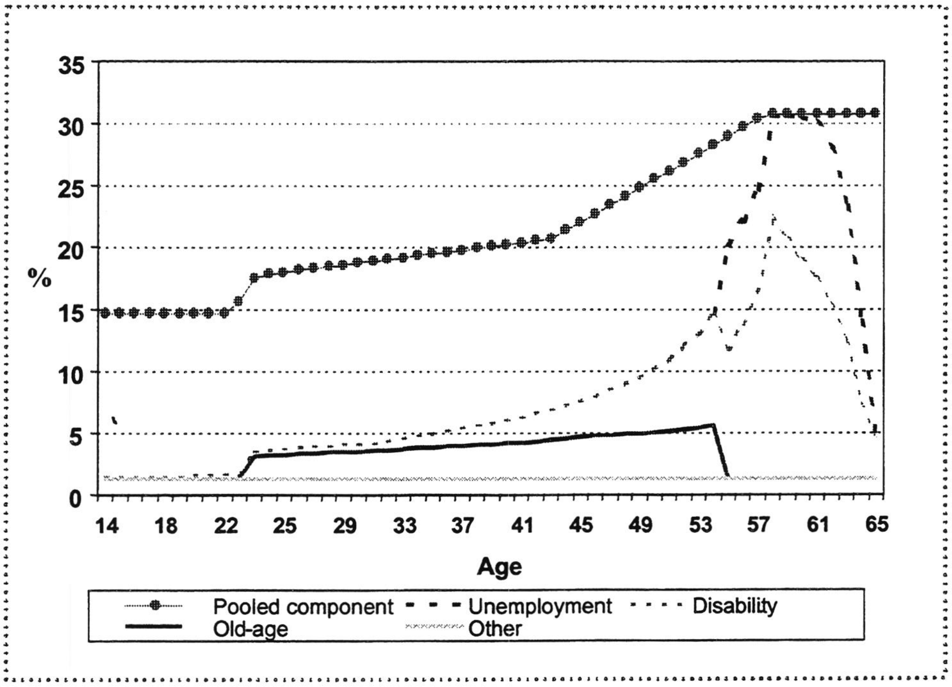


Figure 8. Average components under TEL basic security for male employees in medium and large-scale employer companies, 1998

4.3 Contributions for other statutory earnings-related pensions

The bases of contributions for insurance under the LEL and TaEL pension acts are in principle determined as for the TEL insurance of small employer companies.

In 1998 the LEL contribution is 22.2 per cent of wages paid, and the TaEL contribution 16.0 per cent. The contributions do not depend on the insured person's age or sex, nor on the number of insured persons of the employer company. The contributions include the employee's share of 4.7 per cent of wages as for all other wage earners, except for the MEL branches.

Of the contributions under *the Seamen's Pensions Act* (MEL), the contribution of both employers and employees is a fixed 9.5 per cent of wages, i.e. 19 per cent in total. The State pays a third of pension expenditure, which is about 10 per cent of the wage bill in question.

The rate of contribution under *The Self-Employed Persons' Pensions Act* (YEL) follows the average TEL contribution, and is 21.1 per cent of earned income (1998). The difference from the TEL contribution is due to the fact that it is not necessary to collect certain liabilities deficit contributions that are temporarily collected under TEL. The YEL contribution does not depend on age or sex.

The rate of contribution for new self-employed persons under 43 is reduced by 50 per cent during the first three years.

Due to the age structure among the self-employed, the pension expenditure has usually exceeded the premiums written, and therefore funds have not accumulated. To the extent that the contribution income is insufficient for pension expenditure and administrative costs, the government covers any deficit.

In the *Farmers' Pensions Act* (MYEL), the rate of contribution in 1998 is the same as for other self-employed persons (21.1 per cent) for earnings exceeding about FIM 153,000 a year. If the earnings are less than FIM 97,000 a year, the rate is 10.3, and will grow according to a sliding scale related to the income within the earnings scale FIM 97,000 - 153,000 a year. The full rate of contribution has not been collected from farmers with small incomes. The State pays the main part of the farmers' pension expenditure.

4.4 Funding

4.4.1 Principles of funding

As regards earnings-related pension insurance according to TEL, LEL, MEL and TaEL, funding is carried out on an individual level, and the pension institution alone is responsible for the funded components of the pensions.

The Ministry of Social Affairs and Health confirms all the actuarial bases for calculation of the pensions on application by the pension institutions. They are the same for all pension institutions within the statutory earnings-related pension system. For these funded components of the pensions, the pension institution calculates the technical provisions (corresponding to the capitalised value or NPV of the funded pension part) for each insured person according to actuarial methods. The pension institutions are jointly liable for the other components (or pay-as-you-go components) of the pensions, and the costs are covered annually by the pooled component included in the contribution.

When calculating these technical provisions, a discount rate of 3 per cent is used. The discount rate, as in any similar calculations, is an artificial rate of interest used for capitalisation of future values in connection with fund or contribution rate calculations.

The other artificial interest rate used within the system, the TEL-calculated interest rate, determines the lower limit of the required return on a pension company's investments, and it is also used when calculating interest on contributions (e.g. due to delayed payment). At the beginning of 1998, the calculated interest rate was 5.5 per cent. The calculated interest rate follows the general development of the interest level, and its upper limit is the return on the pension institution's investments.

After the reform of the funding system in 1997, the difference between the calculated interest rate and the discount rate is used for strengthening of funds. In order to preserve the level of funding in the scheme, it is necessary to set the calculated interest rate at as high a level as possible. In the reform of the pension funding system at the beginning of 1997, one of the aims was to bring the solvency of the statutory earnings-related pension insurance companies to a level corresponding to the changing and possibly more risky but hopefully also more profitable investment environment, and thus to improve the financial basis.

Previously, until 1996, the difference between the calculated interest rate and the discount rate was used for financing annual expenditure arising from unfunded pensions. Consequently, there was a correlation between the level of contributions and the calculated interest rate. If it was necessary to lower the calculated interest rate, the disposable income from interest for financing the pensions decreased at the same time, and the rate of contributions had to be raised to a corresponding level. When the interest difference was transferred for use in strengthening the reserve funds, the above-mentioned direct correlation between the rate of contribution and the calculated interest rate was removed. For the next 2-3 years the interest difference will only be used for raising solvency to the target level.

The discount rate used when calculating the technical provisions was lowered from the previous five per cent to three per cent.

Had no other measures been taken, the reduction of the discount rate would have brought about an increase in the technical provisions and an immediate need to supplement the pension reserve funds by FIM 70 billion. Since the financing of any supplements was not possible due to the amount of money needed, there was a conversion of the funded pension components earned, so that the total amount of the funds remained unchanged.

As a result of the drop in the discount rate, the funded components of the pension contribution would also have risen. A reduction of the funded component of the pensions in current payment would also have raised the pooled component of the contribution. In this situation it was decided that the future old-age pension accrual to be funded should be lowered from 1.5 per cent to 0.5 per cent a year, so that pressures on raising the pension contribution due to the reform could be avoided, and the level of contribution could be kept unchanged.

These changes in the financing technique for the earnings-related pensions also concern pension funds.

Nowadays, the YEL and MYEL pensions are not funded, but are financed according to the pay-as-you-go system. Part of the costs are charged from the insured. The State provides for the costs as far as the contributions collected are not sufficient. The amount of the funds of the private-sector statutory earnings-related pension scheme at the end of 1997 appears in Chapter 9. Statistics.

4.4.2 Funding by pension benefit

The principles concerning funding and determination of contributions for statutory earnings-related pensions are stipulated in the TEL pension act.

When the TEL came into force on 1 July 1962, a pension corresponding to 1 per cent of the annual earnings of a person under 50 years was funded for *the old-age pension*.

Since 1977, a pension corresponding to 1.5 per cent of the annual earnings has been stored in funds for old-age pension purposes. At the beginning of 1997, the liability of the pension institutions was limited to 0.5 per cent, i.e. one-third of the above mentioned amount. This change was related to the simultaneous reduction of the discount rate. The old-age pensions for which the pension institutions were liable, were also converted separately for each insured person, so that changes in the discount rate would not lead to a need for replenishment of the funds. The reform did not involve any adjustment of the level of paid or future pensions.

Besides interest, mortality by age and sex of the insured is considered when calculating the technical provisions equivalent to the funded old-age pensions. The difference in mortality between men and women is shown by the fact that the average mortality for a woman is the same as that for men eight years younger. Another significant feature is that the average life expectancy of the insured has continued to grow during the last few decades. Therefore, when calculating the technical provisions and the rate of contribution in old-age pension insurance, the basis of calculation has further been divided into four categories according to year of birth, so that the contribution base is lowest for the oldest age group, and will increase when moving towards younger age groups.

The pension institution is fully liable for the projected *disability pension* at the level corresponding to the time of commencement of pension. A TEL pension institution will also be liable for possible LEL and MEL components of the pension. If a pension is granted only on the basis of paid-up pensions, there will be no funding. The funding of disability pensions depends on age and on the duration of pensions that have begun, but not on sex, however. There is some variation in the annual results of the disability pension business, which complicates setting of the risk premium.

As regards *unemployment pensions*, a pension institution's liabilities are determined as for disability pensions, except that according to TEL the funded component is half of the amount of the pension at its commencement, if the pensionable employment contract has lasted for at least five years. As regards the Pension Fund for Performing Artists, TEL is applied. For the short employment contracts typical of TaEL, there will be no funded component, however. The funded component of unemployment pensions under the other acts on earnings-related pension is 30 per cent of the initial amount of the pension. In these cases, the funding of the unemployment pensions is the same as in the corresponding old-age pension scheme.

Apart from the funded components, pensions are financed jointly through the pooling mechanism. A pooled component is collected for this purpose. The expenditure on pooled pensions has risen strongly, and this has led to frequent raising of the pooled component.

According to Finnish insurance legislation, insurance companies are obliged to make separate reservations for the risks related to insurance business. These are called equalisation reserves and they are part of the technical provisions. The equalisation reserve is also important as regards the solvency of single companies. It eases the need to provide for bad years in other ways, for example through the equity.

The task of equalisation reserves is to:

- function as a buffer and be available and to improve the company's solvency in years with a high loss frequency

- level out random fluctuations in pension expenditure so that incidental losses can be covered by random surplus from earlier years, and,

- reduce the need for unexpected rises in the rate of contribution.

The size of the equalisation reserves is not however determined according to the actuarial principles applied when calculating the technical provisions of a single company. Over the years, equalisation reserves have been built up mainly in the disability pension business and earlier also in the survivors' pension business.

If the contributions collected prove insufficient, or a pension institution is unable to meet its liabilities, the pension institutions are, according to the TEL, jointly responsible for the costs through the pooling mechanism. This provision has been applied to the disability and mortality bases. In 1986 the funds of the pension institutions had to be jointly and severally supplemented through the pooling mechanism with a total amount of FIM 2,000 million.

The principles of funding old-age pensions were last adjusted at the beginning of 1997. The adjustment was carried out at the same time as the change in the discount rate, and according to the same principle. In other words, the funded pensions were converted so that the liability remained unchanged when calculated by the new coefficients.

4.4.3 Coverage of technical provisions

Statutory basic pension security activity normally involves no liabilities deficit, and the calculated values of technical provisions must be fully covered by proper capital assets (a more detailed account of the rules of coverage is given in section 4.6). Through amendments in the Act on company pension funds in 1996, the Act was harmonised with the Insurance Companies Act and the Friendly Societies' Act, according to which the pension liabilities were to be fully covered within a certain period of transition. Previously, company pension funds were allowed a liabilities deficit of 30 per cent maximum also for mandatory pensions, provided that credit insurance had been lodged as security for the liabilities deficit.

An example of the exceptions is the reduction on the pension contribution granted in 1994 on account of the economic depression. The reduction of two per cent of wages was entered as a mandatory liabilities deficit on the balance sheet of the insurance company, and the related repayment schedule is 0.4 per cent of wages between 1996 and 2000.

4.5 Use of the surplus

The annual surplus of a pension company transacting statutory earnings-related pension insurance business is determined in connection with its annual accounts. Section 4.6 on investment operations examines the results according to current values and their relation to the book results.

TEL pension surplus may accumulate mainly as follows:

- The interest yield on investments is higher than the calculated interest rate.

- The calculation bases gain a surplus so that the net contribution is not needed to its full extent for corresponding payments. Payments also include reserves for contingencies and transfer to the equalisation reserves for years with a high loss frequency.

- Savings accrue from the administrative component of the contribution.

An insurance company may grant only a "reasonable" interest rate to owners of the guarantee capital or shares. In practice, reasonable interest is the same as the calculated interest rate, possibly with a small risk supplement. Thus, in a company transacting statutory earnings-related pension insurance business, only the invested capital with reasonable interest belongs to the owners of the guarantee capital or share capital. The rest of the company assets are part of the insurance portfolio.

In connection with the reform of the financing system of the statutory earnings-related pension scheme in 1997, a new component of the technical provisions was formed in order to improve the solvency of the companies, the so-called reserve for future losses which may be used at least for investment losses.

The use of the surplus also implies that companies annually make reservations for credit losses. Moreover, an upper limit has been set for the equalisation reserves. Any surplus will then be considered as annual surplus.

The solvency of a company also regulates how much of its annual surplus a company can transfer to the reserve for future bonuses. If the solvency of a company is regarded to be at an insufficient level, correction of this will be given priority. In the section on investment operations (4.6), the theoretical risk limits set for the solvency of a company, and their impact on the composition of the reserve for future bonuses and losses will be presented.

Apart from what was mentioned above, the annual surplus is transferred to the reserve for future bonuses to be credited to the policyholders as reductions of contributions. This is based on the Insurance Companies Act, the Act on Earnings-Related Pension Insurance Companies, and there is a provision on the matter in the Articles of Association of the companies. Contributions calculated according to the normal bases are annually credited from the reserve for provision for future bonuses. The reserve for future bonuses is not counted as solvency, and it may not be used for investment losses.

All TEL pension institutions must meet the same minimum yield requirements and the same calculated interest rate. As was mentioned above, part of the surplus of the insurance companies is used for reductions of contributions. The pension funds will correspondingly use part of the annual surplus for the pension institution's expenses, which thus reduces the employer's future expenses, i.e. contributions.

4.6 Investments in the statutory earnings-related pension scheme

4.6.1 The principles of investment of pension assets

The principle of partial funding of the statutory earnings-related pension scheme also has consequences regarding investment activities. Regardless of the method of financing, pension systems are always dependent on the state of the national economy. In a system such as the Finnish statutory earnings-related pension scheme which is largely based on the pay-as-you-go system, this correlation is especially strong. This is due to the fact that a notable proportion of future pensions (at least 70-75 per cent according to some estimations) is not funded in advance, and the means needed thus have to be collected from future employees as pension contributions. However, even if we can not fully finance future pensions only by accumulated funds, and their yields, good returns naturally help to prevent too sharp rises in future payments. Maybe an even more essential argument is that funding promotes saving in the national economy, and creates investment potential. Through investments, production grows and thus improves the prospects for the financing of future pensions.

The pension assets of the statutory earnings-related scheme have been directed to guarantee the growth of the national economy through granting loans to companies against safe securities. The interest rates of the loans have generally fluctuated with the total interest yield required on the pension reserve funds, i.e. the calculated interest rate. Thanks to safe securities and the fluctuating interest rate, investment operations have imposed only minor requirements on the solvency of companies, i.e. on their solvency margin.

During the past few years, the demand for loans granted by TEL companies has fallen dramatically (c.f. Figure 9). There are many reasons for this fall, the most important being the change in own capital financing which has become more profitable in the last decade. Furthermore, as a result of the recession, the enterprises strive to improve their solvency, and an increasing number of enterprises are able to get own capital financing as well as favourable loans from abroad. Furthermore, the administrative interest on the premium loans has been too inflexible and is thus no longer functional as the money market has been liberalised in other respects.

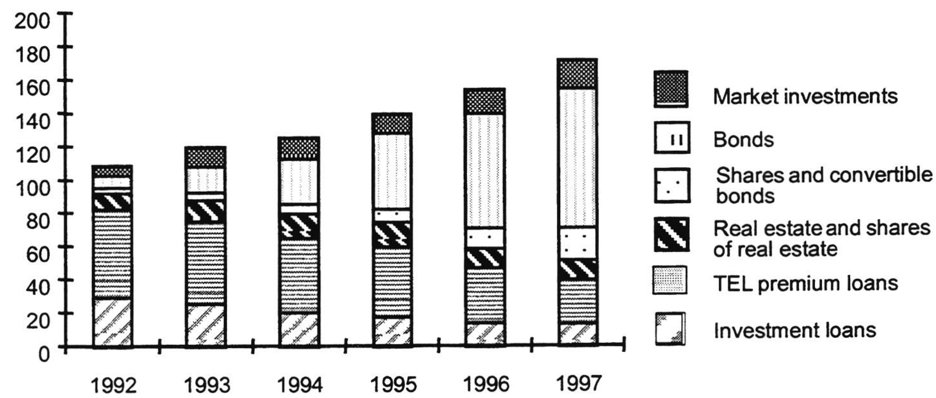


Figure 9. Investment portfolio of pension institutions operating statutory earnings-related pension insurance FIM billion (pension insurance companies, LEL, MEK)

The figure above shows that due to the new situation, pension assets have been increasingly invested in government bonds. The primary reason for the popularity of this investment form has been that it has been practically impossible to make any other investments given the poor solvency of the companies.

The poor solvency of the companies is, above all, a result of the fact that in the earlier investment environment there was no need to improve the solvency, as premium loans did not involve any risks. This meant that over the years, the companies' surplus from their investment operations has primarily been credited to the policyholders as reductions of contributions.

The investment activities have been criticised for not having yielded the level of profit which could have been gained by justifiable alternative methods (c.f. Figure 10). In this connection it must be remembered, however, that previously, when the major part of the pension assets were invested in premium loans, pension expenditure was paid by businesses, either as TEL contributions or as interest on loans. It must also be pointed out that pension companies have achieved better yield on their investments than the calculated interest rate, and this yield excess has been, as already mentioned above, credited to policyholders.

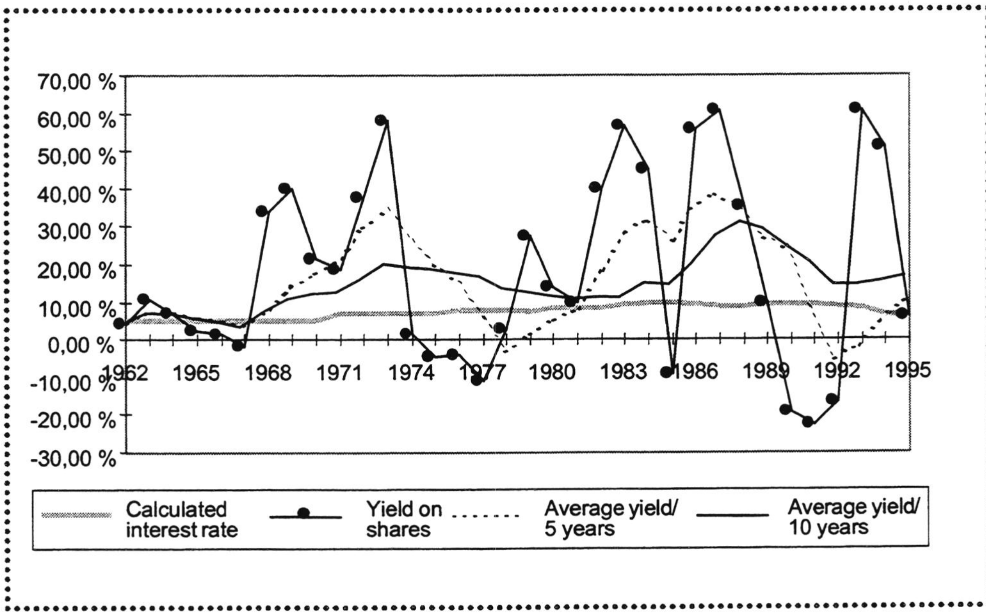


Figure 10. Comparison of the calculated interest rate with the equity market yield. In addition to the annual dividend and the yield included in the change of value, the yield is also presented as an average on a sliding scale of five and ten years

The TEL came into existence at a time of a regulated money market and scarcity of capital. This has had a great impact on the kind of investment operations the scheme has used during its history. Later, the money market was liberalised, and capital scarcity is no longer a problem. This clearly also means that the working principles in many parts of the TEL pension scheme has had to be re-examined, since the world has fundamentally changed.

4.6.2 Regulations on the investment of pension assets of the statutory earnings-related scheme

Since Finland joined the European Economic Area and later the EU, the insurance business related to statutory earnings-related pensions was left outside the scope of the directives on life assurance. Despite this, the principles of the life assurance directives are followed both in the investment of pension assets, and in many other areas.

In practice this means that most of the regulations on the investment of pension assets are based on the Insurance Companies Act, which has been amended according to the life assurance directive, and on the decrees issued on the basis of this Act. According to the Insurance Companies Act, a pension company transacting statutory earnings-related pension insurance business has to cover its pension liabilities. Coverage of liabilities also implies ensuring the security of assets, their yield and convertibility into money, and diversification of assets. According to the Act, the cover shall consist of bonds or other money market instruments, obligations, shares in investment funds, real estate or other property items mentioned in the Insurance Companies Act.

In the decree on cover of the technical provisions, it is defined to what extent the technical provisions can be covered by each of the above-mentioned property items. Also in this field, the general principles valid for all insurance activities apply.

The technical provisions have to be covered primarily with assets in the currency in which the insurance company has to meet its liabilities. However, a maximum of 20 per cent of liabilities to be met in a certain currency can be covered by assets in another currency.

Limitation of single cumulating risks to a certain part of the total amount of the technical provisions also follows the restrictions in the mentioned decree regarding all insurance activities. As regards investment operations, it must be further noted that an insurance company may not, without a separate licence, own the share majority or have controlling power in associations other than limited liability companies pursuing insurance business.

The supervisory board of a pension insurance company must draft an investment plan for the company assets. In the investment plan the nature of the company's insurance business must be considered. The solvency margin, reinsurance and other factors influencing the company's solvency, have to be organised in such a way as to safeguard the interests of the insured party. The investment plan shall comprise a statement from the company's actuary on whether the investment plan fulfils the requirements laid upon the investment activities of the company, with regard to the nature of the company's technical provisions. The regulations on investment operations for pension funds transacting statutory earnings-related pension insurance follow from the applicable acts. However, as a rule, the investment activities of these pension funds follow the same principles as the insurance companies.

4.6.3 Amendments in the marginal conditions of investment operations

As the problems related to fund capital investment within the TEL scheme became more obvious, the Ministry of Social Affairs and Health assigned a consultative commission with representatives of the labour market in 1995 to investigate the investment activities of insurance companies transacting statutory earnings-related pension insurance. As the work proceeded, it became clear that the investigations also had to cover the future financing of pensions, the rate of interest employed in the calculation of the funds, usage of the investment yield, and their interdependence.

As a result of the work of the commission, ways of improving the solvency of the pension insurance companies were found, and the interest of the premium loans was changed to follow market conditions. Through improved solvency, the aim is to make it possible to make investments in assets involving higher risks, but yielding better profits.

The change in the rate of interest also helps to overcome the insufficient solvency of the TEL scheme. At the initial stage, it was agreed that within two years, the difference between yield requirements and the rate of three per cent would be transferred to the solvency margin to increase the solvency of the pension institutions. Previously, the solvency regulations applied to TEL companies implied very low solvency. The limits were defined according to those of private life assurance companies, and they represented one tenth of the limits of these companies. In practice this meant that the required solvency for the companies was only about 0.5 per cent of the technical provisions.

The new solvency regulations provide minimum limits on solvency, on the one hand, and lay down a recommended target zone for solvency, on the other hand. A company's solvency should normally be within these limits (c.f. Figure 11). Moreover, calculation of the solvency limits shall be based on the risks inherent in the company's investment portfolio, and thus not be fixed.

In practice this means that a company may operate without special supervision when the solvency is 4-6 per cent of the technical provisions, depending on the investment portfolio. The lower limit of the target zone for the solvency margin is then 8-12 per cent of the technical provisions, and the upper limit is 16-24 per cent of the technical provisions.

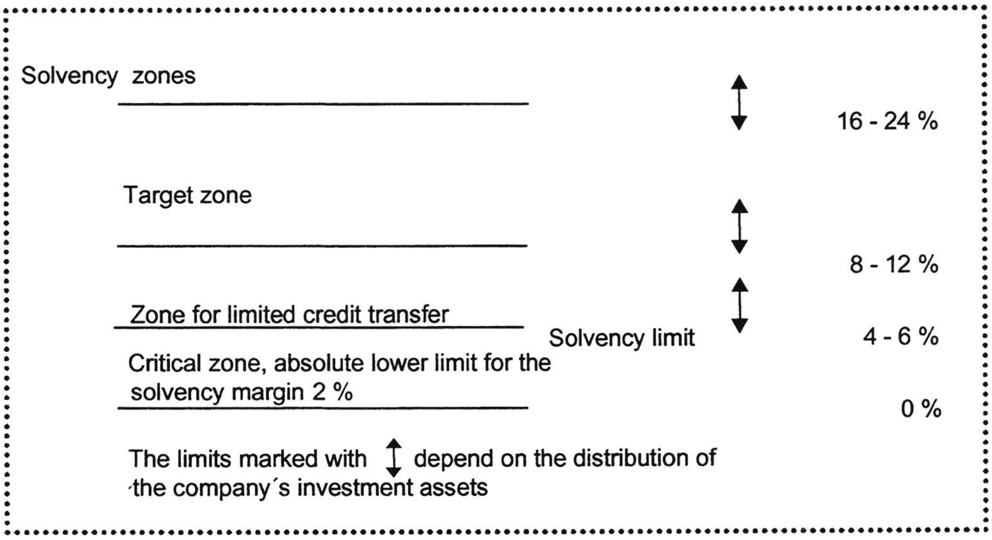


Figure 11. Solvency margin limits of pension insurance companies 1997

In the above discussion on actuarial methods and funding, the surplus and profit sharing of pension companies has been examined. In their book-keeping, the companies apply a method where assets are valued according to the book value based on the acquisition cost, and only a fall in the market value of assets below the book value should necessarily be considered in the final accounts. The result and profit sharing shown in the companies' final accounts are based on these book values. This is not a sufficient basis for investigating the solvency of companies. Thus, in the solvency examinations, the basis is formed by a calculation based on the market value of assets. Consequently, the position of a company in the solvency figure above depends on its solvency calculated on the basis of market value. The chances for an insurance company falling below the target zone to distribute its surplus to the policyholders as reductions in contributions are limited. On the other hand, an insurance company above the target zone is not able to increase its solvency, but the surplus has to be distributed to the policyholders.

The improvement of solvency leads to a situation where the bodies involved in the scheme finance the improvement in one way or the other. In a decentralised scheme, this will cause concern about who the owners of the capital constituting solvency are. At the turn of the year 1996-1997, the previous agreement of the labour market organisations was confirmed, prescribing that, of the company assets, only the invested capital with refunded reasonable profit belongs to the owners of a pension company handling statutory earnings-related pensions, or the holders of guarantee capital.

In the discussions of the commission, the view that future pensions can be guaranteed only by strengthening the Finnish national economy was reinforced. The commission did not give any recommendations for increasing international investment as an absolute goal due to this, however, but it did recommend an increase in international investment when justified in view of diversification, and when there is not enough demand for capital in Finland.

The conditions for taking up premium loans were also altered. According to the commission, companies should preserve the right to borrow from the funds accumulated through their contributions. Furthermore, the premium loans should primarily be long-term financing. It was also regarded as important that the premium loans should have secure guarantees; a TEL company's right to recall a loan should be limited to such situations where the borrower neglects payment of interest or amortisation.

During the past few years, it has become obvious that the administrative rate of interest applied to premium loans is no longer feasible in the free money market. As a result, the interest of loans is bound to the market rate of interest. The level of interest is determined daily according to the bench marks based on the bonds issued by the Government of Finland (Figure 12).

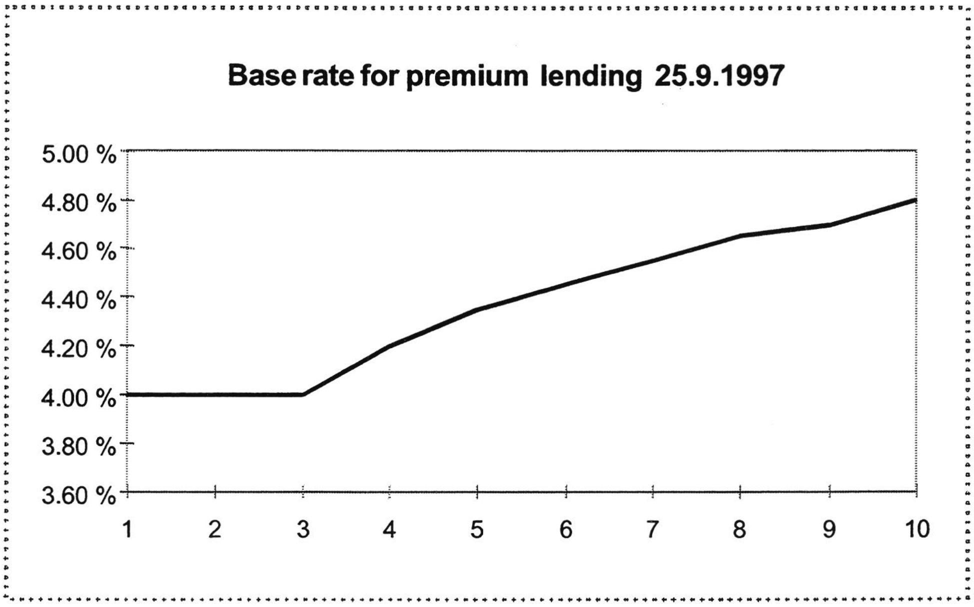


Figure 12. Interest level of the new premium loans as a function of the duration of the loan. The loan is an annuity loan with a due date for interest and amortisation twice a year, with interest paid later.

In addition, it was also agreed that the rate of interest on a premium loan granted against the best possible security is the same in all TEL companies. This means a situation where the loan has a direct or indirect guarantee granted by the State (for instance a bank guarantee as long as the State ultimately guarantees the liabilities of the banks). For other securities, the insurance company sets a price on the credit risk, and the interest rate depends on the risk assessment of the company.

It was also agreed to introduce a fixed rate interest for premium loans. As a consequence of this, compensation is claimed for premature repayment of the loan when the level of interest has fallen from the time when the loan was taken out.

An important change at the turn of the year 1996-1997 was that special attention was paid to the autonomy. of investment of pension assets. A pension insurance company transacting statutory earnings-related pension insurance business, must have its own investments organisation. In matters related to investment activities, a company handling statutory earnings-related pensions must not assign its power of decision to any instances putting the autonomy of the investment activities at risk.

The managing director of an insurance company transacting earning-related pension insurance shall have sufficient knowledge of statutory earnings-related pension insurance and business management, and furthermore, sufficient knowledge of investment. The Board of Directors of a pension company shall also have sufficient expert knowledge of investment operations, and each member of the Board of Directors shall have sufficient knowledge of statutory earnings-related pension insurance.

The changes described above normally also concern investments undertaken by pension funds.

5 VOLUNTARY SUPPLEMENTARY PENSIONS

The statutory pension provision for employees and self-employed persons may be supplemented by an employer-based or industry-wide voluntary supplementary pension. Most voluntary supplementary pensions are employer-based, since there are very few supplementary industry-wide pension schemes in Finland. Such second pillar supplementary pension provision can be arranged as group pension insurance or as individual pension insurance. Companies may also pay pensions directly from company assets without pension insurance. In the private sector about 20 per cent of the employed come under the second pillar supplementary pension system.

Statutory pensions and voluntary supplementary pension insurance arranged by the employer can also be complemented by private supplementary pension insurance. About five per cent of the employed have taken out private pension insurance.

5.1 Scope of the voluntary supplementary pension scheme

Voluntary supplementary pensions are mainly used for lowering the retirement age and for raising the pension level of older age groups to the maximum level of the statutory earnings-related pension. Younger age groups may also need to supplement their pension if the accrual time of about 40 years required for a full statutory pension is not reached due to breaks in the working career, for example.

The significance of voluntary supplementary pensions is small when considering the pension system as a whole. One of the reasons is that in the statutory earnings-related pension scheme there is no upper limit for the pensionable wage, nor for the size of pension.

Pensions paid under various voluntary pension schemes correspond to approximately 6 per cent of the total expenditure on statutory earnings-related pensions. In many cases, optional group earnings-related pension insurance schemes are pension arrangements used before the introduction of the statutory earnings-related pension scheme, whereas the number of personal pension insurance policies has risen rapidly during the past few years. Most of these (about 60 per cent) are private insurance, so-called third pillar insurance.

5.2 Administration and cover of the voluntary supplementary pension scheme

Voluntary, group earnings-related pension insurance may be arranged in a company pension fund, an industry-wide pension fund, or in an insurance company with a concession in Finland, or a company operating in another EU Member State. Personal pension insurance can only be taken out in an insurance company. As is the case for the statutory pension system, the highest supervisory authority for insurance is the Ministry of Social Affairs and Health.[5]

In 1997, voluntary supplementary pension insurance was arranged in 146 company pension funds, in nine industry-wide pension funds, and in 19 insurance companies with concession granted in Finland. In addition, there are two foreign life assurance company agencies in Finland, and 31 foreign life insurance companies have reported that they pursue insurance activities in Finland. There are also seven burial and redundancy funds.

More than 50 per cent of the voluntary group earnings-related pension insurance policies are arranged in insurance companies, just under 40 per cent are arranged in company pension funds, and about six per cent in industry-wide pension funds.

A company pension fund may cover the personnel of one employer or the personnel of employers of the same group. An industry-wide pension fund may comprise employees of a certain group of employers in a larger sense, for instance the employees of companies in a certain

5 Described in detail in Chapter 7. The regulation, steering and supervision of pension schemes

branch of industry. A feature common to the company and industry-wide pension funds is that all persons (and not certain appointed persons, only) who meet the rules of membership in the fund are accepted as members.

The rules for membership are determined in the same way as in TEL. It is common, however, that a minimum and/or maximum age limit has been set for admittance into the voluntary, supplementary pension scheme. There is also a longer waiting period than in TEL. The waiting period may vary from a few months to several years. Many pension funds have been closed from a certain date, which means that those employed after this date will no longer come under the supplementary pension scheme. The agreement between the insurance company and the employer determines whether the insured will come under the voluntary supplementary pension scheme.

According to a survey conducted by the Central Pension Security Institute in 1992-93, about 220,000, i.e. 20 per cent of the TEL-employed, were covered by a voluntary group pension scheme.

The number of persons insured under a voluntary group pension scheme was divided into age groups so that nearly 30 per cent of those over 50 and almost 20 per cent of those under 50 were covered by the insurance. The distribution according to sex was uniform across all age groups, but among men over 50 about 31 per cent belonged to a group pension scheme, whereas the women's share was 27 per cent. Of those belonging to a group pension scheme, 90 per cent were working in a company with at least 50 employees, and 70 per cent were working in manufacturing, the finance and insurance business or trade.

According to the survey, nearly one per cent of the TEL employees had been promised an optional supplementary pension on the basis of, for example, pension regulations. Furthermore, employers paid pensions directly to about one per cent of the beneficiaries of a TEL pension. Lump-sum benefits are paid to 30,000 persons covered by burial or redundancy funds. At the end of 1996, about 175,000 personal pension insurance policies supplementing the statutory pension had been taken out. Of these, 170,000 included provision for old-age pension. These so-called third pillar pensions taken out by private persons, amounted to about 60 per cent.

The number of insurance policies increased by about 40,000 compared to the previous year. Most private pension insurance policies were bought by persons 45-49 years of age. The next biggest group was 40 - 44 -year-olds. Men and women bought roughly the same amount of private pension insurance.

5.3 Determination of voluntary supplementary pension

Voluntary pension insurance can be arranged through a supplementary pension registered at the Central Pension Security Institute fulfilling certain conditions laid down in the acts on earnings-related pension, or through a fully optional earnings-related pension.

A registered supplementary pension has the same status as a statutory pension, for example as regards index linkage and the vesting principle. Optional pension insurance is not subject to the same conditions as the registered supplementary pension, but in practice the regulations related to taxation of contributions unify the contents of these insurance policies to a great extent, and limit the number of insurance policies bought from abroad. Taxation is discussed in more detail in Chapter 6. The Insurance Companies Act provides that a supplementary pension taken out in an insurance company is always vested and preserved. A supplementary benefit taken out in a pension fund, however, is not automatically vested, unless the benefit is registered. Any entitlement to vested supplementary benefits shall be laid down in the pension fund rules. When this is the case, additional conditions concerning length of employment are usually applied.

The provisions of the Employee's Pensions Act are partly applied to the registered supplementary pension, and the Central Pension Security Institute has drafted the specified form and norms for registration requirements. The benefits and scope of insurance are defined in the rules of the pension funds, and in the insurance contracts of insurance companies. A registered supplementary pension arrangement may encompass either an old-age, disability or unemployment pension, or a survivors' pension, or both. The pension right is determined as for the mandatory pension system. The registered supplementary pension has been so defined that the target rate is maximum 66 per cent, and it will be reached in 25-40 years. When calculating the target level, the statutory pension accruing from the same work is considered. The supplementary pension is integrated with other earnings-related pensions and other pensions reported by the employer. In the integration of pensions, the pension total must not exceed the set percentage (maximum 60-66 per cent of the highest earnings less the employee's contribution).

Optional pension insurance can be somewhat freely composed, and these insurance policies do not have to be related to the statutory pension scheme. In general, old-age, disability and survivors' pensions, and burial grants are paid under the group pension arrangements, however, and the total pension is generally determined as a certain target percentage of the wage considering the statutory pension. The individual supplementary pension arrangements, on the other hand, often include only old-age pensions and the principal purpose of the insurance is to lower the retirement age.

The benefits and scope of the optional supplementary pension insurance are defined in the rules of the pension funds, and in the insurance contracts of insurance companies.

In the survey carried out by the Central Pension Security Institute in 1992-93, the target level of the total pension was 60 per cent for 40 per cent, and 66 per cent for 30 per cent of those covered by group earnings-related pension insurance. Nine out of ten had an earnings record of 25-30 years, and 40 per cent had a reduced retirement age. Of these, two thirds were women. The most frequent reduced retirement age was 63 years (45 per cent) and next category 60 years (37 per cent). The lowest retirement age was 50 years.

There are no data on the possible target amount or percentage for personal pension schemes. The personal pension schemes are principally defined-contribution schemes. The average annual contribution of private insurance in 1996 was about FIM 12,000. In that year 95 per cent of the insurance policies sold to private individuals had a reduced retirement age, and the lowest retirement age was 58 years. Two thirds had a retirement age of 58 years, and the duration of pension was 5 - 10 years, i.e. until the statutory retirement age. The lowest retirement age for tax deductible contributions is 58 years. The popularity of such a low retirement age is partly due to the fact that the retirement age is easy to raise, but hard to lower.

5.4 Financing of the voluntary supplementary pensions

The contributions of voluntary group earnings-related pension insurance can be divided between the employer and the employee. As regards registered supplementary pensions, the employee's share of the contribution must not exceed 50 per cent of the total costs, which is unusual in the case of optional group pension insurance. The most common method is that the employer alone pays the supplementary pension. In a company pension fund this is the rule, i.e. the employer pays the whole cost of the supplementary pension. An individual pension insurance may be financed either by the insured himself, or by his employer.

The technique applied to contributions for voluntary supplementary pensions registered in the Central Pension Security Institute is partly based on the same principles as those of the statutory pension system, but there are differences. The most obvious difference is that the level of funding is higher for supplementary pensions than for statutory pensions. Contrary to the statutory pension system, survivors' pensions are funded, the funding of old-age pensions continues until the retirement age and, furthermore, both survivors' pensions and disability pensions are already funded during the active period. Instead, index increments and disability pensions are not funded, but are financed jointly. A pooled component is included in the contribution for the pension components to be financed jointly, and part of the return on funds is used to finance these pension components. The pension components of the registered supplementary pension scheme to be paid jointly, are financed from the same pool as mandatory pensions. In practice, registered supplementary pensions are compensated for from the statutory pension scheme, which is due to the index increase caused by the high level of inflation in the 1970s. The discount rate was lowered in 1998 for the financing system of the registered supplementary pensions in the same way as in the statutory pension system in 1997.

If an optional pension is arranged in a company pension fund or an industry-wide pension fund, advance confirmation of the financial bases shall be obtained from the Ministry of Social Affairs and Health. The bases often resemble those of the registered supplementary pension scheme, but pensions under an optional pension scheme cannot be financed from the same pool as the mandatory pensions.

Index linkage of the pensions can be freely decided in optional insurance. The TEL index is used most often, but pensions are also increased by other indices, such as those determined according to the yield on funds. Benefits are raised only within the limits of the fund returns, however. In case better index protection for these pensions is wanted, a supplementary contribution has to be collected. Pension funds are able to change contributions or the benefits of insurance in the course of time. In this respect, pension funds differ from insurance companies in that an insurance company may be released from its liabilities without an agreement with the other party only if it goes bankrupt. For the present, the company pension fund's optional supplementary pension liabilities do not have to be covered to their full extent, as the company pension fund is allowed a liabilities deficit. Contrary to industry-wide pension funds and insurance companies, a company pension fund engaged in supplementary pension insurance may carry on its activities, although its assets are not equivalent to the amount of pension liabilities. In terms of insurance technique, a company pension fund transacting supplementary pension insurance lies between the fully funded system and the pay-as-you-go system.

As a result of the recession at the beginning of the 1990s, the share of pension liabilities to be covered in company pension funds transacting supplementary pension insurance business has been increased however, and by the year 2010 funds have to cover their pension liabilities to their full extent.

The financing bases for the insurance policies of an insurance company do not involve the advance confirmation procedure. For older insurance policies the insured are in general promised a certain level of benefit, and the financing bases are largely the same as those of pension funds. As for newer insurance policies, and especially for individual insurance policies, normally no level of benefit is guaranteed, but the pension is directly determined on the basis of contributions. The insurance policies are adjusted either directly on the basis of the yield accumulated from funds without any minimum yield requirements or, alternatively, through the yield corresponding to a certain minimum rate of interest.

6 PENSIONS AND TAXATION

As a rule, both statutory and voluntary pensions are taxable income for pensioners. The employer may deduct paid pension contributions in his taxation. The insured may deduct the statutory contribution in full, and the voluntary contributions may be deducted with certain limits. Pension institutions are liable to pay income tax like any other companies.

6.1 Main features of the Finnish tax system

Income tax is paid to the State, the municipalities and the parishes. The income tax for natural persons is progressive. Six income categories are applied: the lower limit of the national taxation is FIM 46,000 (1998), and the lower limit for the highest income bracket is FIM 306,000. The highest marginal tax rate in the national taxation is 38 per cent. Other income taxes are proportional. The average municipal tax rate in 1998 was 17.54 per cent. People pay tax to the parishes only if they belong to the Evangelical-Lutheran Church or the Orthodox Church. The average Evangelical-Lutheran Church tax is 1.3 per cent (1998).

Furthermore, people pay other contributions: the sickness insurance contribution is 1.5 per cent up to an income of FIM 80,000, and 1.95 per cent on the amount above this. The sickness insurance contribution is 2.7 percentage points higher for the pension income. The employee's pension contribution is 4.7 per cent (1998). The employee is also liable to pay an unemployment contribution of 1.4 per cent, which, like the employee's pension contribution, is deductible in the taxation.

An income tax of 28 per cent is paid on capital income. The income tax rate for corporations is also 28 per cent (1998), and it is allocated into parts paid to the State, the municipality and the parish. In addition, the employers pay national pension and sickness insurance contributions. Private employers pay a national pension contribution of 2.40, 4.00 or 4.90 per cent (average 3.25 per cent) depending on the amount of write-offs and the wage bill. Private employers pay a sickness insurance contribution of 1.60 per cent (the average is 1.75 per cent, including all employers).

Companies pay unemployment contributions of 2.8 per cent, on average. In the private sector the average pension contribution is 16.8 per cent (1998).

Property tax is paid only to the State. Persons pay property tax of 0.9 per cent on the amount exceeding FIM 1,100,000. Companies pay proportional property tax of one per cent. Property tax is of minor importance in the Finnish tax system.

A turnover tax of 22 per cent is paid to the State. A premium tax equivalent to the turnover tax is collected from non-life insurance companies. This tax is not collected from life insurance and pension insurance companies, however.

The owners of real estate and sites pay real estate tax to the municipality in which the real estate is situated. The amount of the real estate tax varies by municipality between 0.1 and 0.8 per cent, depending on the use of the real estate.

The Finnish gross tax ratio was approximately 48.3 per cent of GDP in 1997 (including indirect and direct taxes and statutory social security contributions). The net tax ratio was 23.2 per cent (net income transfers from the private sector to the public sector).

6.2 Taxation of insurance and pension companies

Domestic joint-stock insurance companies are taxed as other joint-stock companies. They pay an income tax of 28 per cent. The company and industry-wide pension funds are taxed in the same way.

Pension insurance companies are released from property tax. Even though company and industry-wide pension funds are liable to pay property tax, they do not pay the tax in practice, since their property does not normally exceed the technical provisions. As all other owners of real estate, they must however pay real estate tax to the municipalities.

6.3 Taxation of pension contributions

Employers may deduct the pension insurance contributions paid from their taxable income in both national and municipal taxation. The statutory pension contributions paid by a self-employed person for himself and his spouse are also deductible in both national and municipal taxation.

The insured can also deduct their own statutory contributions to their full extent. The right of deduction of voluntary pension contributions depends on the starting age for the pension, and on the level of the total pension. Voluntary pension insurance contributions are fully deductible up to FIM 50,000 if the pension starts at the age of 58 at the earliest, and if the total pension does not exceed 66 per cent of the wage. If the total pension is FIM 5,000 a month, maximum, the above mentioned limit of 66 per cent can be exceeded without loss of the right of full deduction, however. If the contributions amount to FIM 15,000 a year maximum, and constitute 10 per cent of earnings, they are also fully deductible, without separate calculation of the total pension.

Should the above-mentioned conditions not be fulfilled, or no account of the level of the total pension be presented to the tax authorities, voluntary contributions may only be deducted at 60 per cent up to a maximum of FIM 30,000 a year.

The right of deduction does not concern lump-sum pensions. Contributions for voluntary pension insurance taken out at pension institutions abroad are also not deductible. If a foreign insurance institution has a permanent office in Finland, the contributions paid to the institution are deductible, however.

6.4 Taxation of pensions

All income in cash and all benefits with monetary value are considered as taxable income in Finland, with a few exceptions. Thus, the statutory earnings-related and national pensions are regarded as taxable income as well as voluntary and individual pensions arranged by the employer.

The taxation of social security benefits is arranged so that pensions are taxable income when they are paid to the beneficiaries of the pensions, and the contributions are deductible at the taxation of earnings. Social welfare-type benefits, and expenses compensation, are exempt from taxes.

Some benefits paid as supplements to the national pension, such as a child increase and an increase for a spouse, are not taxable income (these are no longer granted for new pensions). War veterans' supplements paid to veterans are also exempt from tax, as are other benefits payable under the general war veterans' pension scheme. The housing allowance for pension recipients compensates housing costs and is thus tax-exempt. The pensioners' informal 3-scale care allowance aimed at pension recipients dependent on another person's assistance, is also tax-exempt, as is the training allowance for widows or widowers according to the Survivors' Pensions Act.

Even though pensions are principally taxable income, tax is not withheld from income of an amount equal to the national pension. This exemption from tax is safeguarded by so-called deduction for pension income both in national and municipal taxation. In 1998, the lower limit for national taxation was about FIM 50,000 a year due to the national pension income deduction, and the lower limit of general national taxation was FIM 46,000. The lower limit for municipal taxation depends on whether the pensioner is married or not. For single persons, the lower limit for municipal taxation is about FIM 39,000 (1998) due to the basic deduction and pension income deduction granted to everybody. For married couples the lower limit is about FIM 33,800 a year.

Due to the pension income deductions, the taxation of a pension recipient is lighter than that of wage earners at the same income level within the lower income bracket. Since the pension income deduction decreases as earnings rise, this difference will take another direction when the monthly earnings exceed about FIM 6,000, since the pension recipients also pay a 2.7 percentage points higher sickness insurance contribution on their pension income than wage earners (1998). The figure below describes the difference in taxation between the net income of a pension recipient and a wage earner.

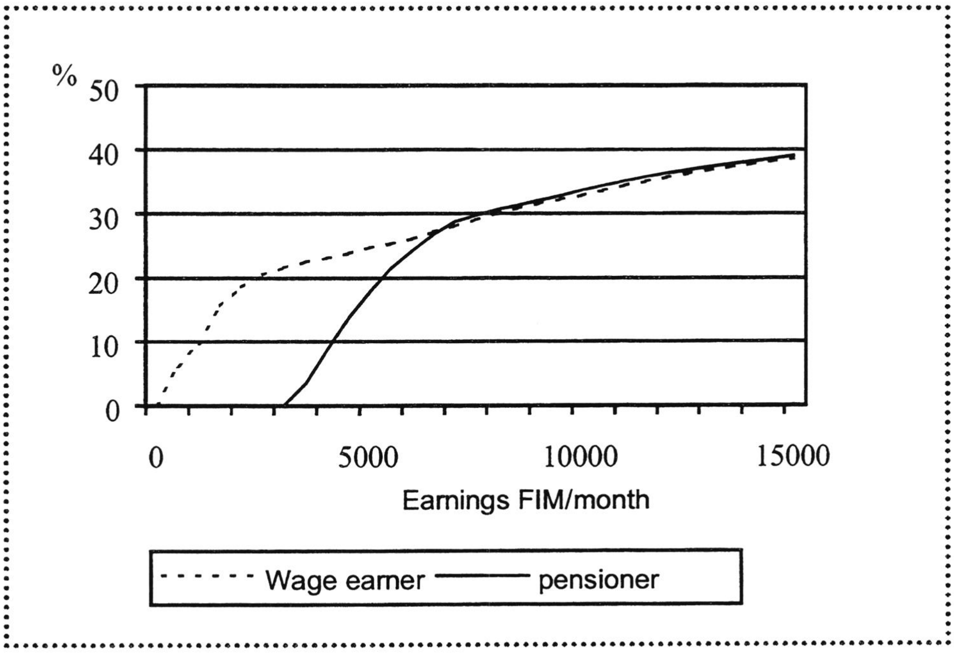


Figure 13. Size of taxes and contributions for pensioners and wage earners

In his taxation, the wage earner may deduct costs for acquiring his income (at least FIM 1,800), the membership fees for professional organisations, the statutory earnings-related pension and unemployment insurance contributions, and interest on housing and study loans. Furthermore, a wage earner with low income gets a decreasing earnings deduction as his income rises (maximum FIM 5,500) and a basic deduction (maximum FIM 8,800). A pension recipient is entitled to pension income deductions in both municipal and national taxation, and to a basic deduction in the municipal taxation like a wage earner.

7 THE REGULATION, STEERING AND SUPERVISION OF PENSION SCHEMES

The benefits and scope of the Finnish statutory earnings-related pension scheme are determined by Finnish legislation. The conditions of the scheme have largely been negotiated during income policy negotiations. Thus, central labour market organisations representing employees and employers have also taken part in the preparation of regulations.

The statutory earnings-related pension scheme is steered by the Ministry of Social Affairs and Health. The decisions and regulations based on law and issued by the Ministry are binding on the insurance institutions and steer their activities. The purpose of the advance confirmation of the bases of calculation and other bases for the insurance business by the Ministry of Social Affairs and Health is to ensure the solidity of the operations of the pension institutions engaged in statutory earnings-related pension insurance business. The Insurance Supervision Authority, subject to the Ministry of Social Affairs and Health, carries out the supervision and inspection of the individual pension institutions.

7.1 Establishment and supervision of insurance institutions

7.1.1 Insurance companies

The founder of a Finnish insurance company may be one or several natural persons or legal persons. At least half of the founders shall be resident in, or, if the founder is a legal person, be domiciled within the European Economic Area, unless the Ministry of Social Affairs and Health grants an exception to this.

A legal person is domiciled in the European Economic Area when the company has been established according to the legislation of a Member State of the European Economic Area, and when it has its permanent domicile, central administration or principal place of business in a state belonging to the European Economic Area.

An insurance company may be either a joint-stock insurance company or a mutual insurance company. An insurance company may also be a public insurance company referred to in the Insurance Companies Act.

As a result of the Treaty of Accession to the European Economic Area, optional pension insurance business was separated from statutory earnings-related pension insurance business in 1994, and transferred to the life assurance companies.

An insurance company transacting statutory earnings-related pension insurance business must have obtained a concession granted by the Council of State. Such an insurance company may not pursue insurance business other than activities under The Employees' Pensions Act and The Self-employed Persons' Pensions Act and related reinsurance. A foreign corporation or a natural person may be the founder of a pension insurance company in Finland, but these are subject to the same restrictions concerning scope of operation and concessions as the pension insurance companies established by Finnish founders.

The minimum basic capital required for a company transacting statutory earnings-related pension insurance business is FIM 30 million.

The Council of State may attach conditions to the concession necessary for safeguarding the interests of the policyholders and the insured, to ensure stable activities of the company, and to promote sound development of earnings-related pension insurance.

The insurance company's Articles of Association and amendments to these shall be confirmed by the Ministry of Social Affairs and Health. The majority of members of the Supervisory Board and Board of Directors shall be persons who are not employed by the same credit or financial institution, or by a company belonging to the same group. In addition, they shall not be members of the Supervisory Boards or Board of Directors of these.

A member of an insurance company's Supervisory Board or Board of Directors may not be a member of the Supervisory Board or Board of Directors of another insurance company transacting earnings-related pension insurance business.

The managing director of an insurance company transacting statutory earnings-related pension insurance business or his deputy may not be a member of the Supervisory Board or Board of Directors of a credit or financial institution, another statutory earnings-related insurance company, another insurance company, or a company of the same group. Furthermore, he may not be an auditor of any of the above-mentioned corporations.

According to present legislation, the assets and other funds of an insurance company transacting earnings-related pension insurance business, shall be kept separate from the assets of other corporations or foundations belonging to the same group. In addition, the financial management and payments traffic of the insurance company shall be arranged so that assets are not used for arranging financial management or payments traffic of another corporation or foundation. As the investment activities of insurance companies transacting statutory earnings-related pension insurance business must also be independent of other bodies, its final accounts may not be included in the final accounts of another insurance company, corporation or foundation.

The Insurance Supervision Authority ensures that the insurance company follows the legislation, the terms of the concession, Articles of Association or regulations stipulated by the Ministry of Social Affairs and Health and the Insurance Supervision Authority, based on the law. The Insurance Supervision Authority also supervises that the company follows good insurance practice and that there is no error in its activities. If it detects such error, it can give the company an admonition, ask it to correct its action within a prescribed time, or prohibit the company from continuing its erroneous action. Furthermore, the Insurance Supervision Authority also has the right to prohibit enforcement of a decision made in a shareholder's meeting, or by the Supervisory Board or Board of Directors, or to take measures to have the matter corrected. To ensure compliance, the it may impose a fine. Moreover, if the prohibition or exhortation is not obeyed, the Insurance Supervision Authority has the right to stop the insurance company from issuing new insurance policies until the matter has been corrected.

As an extreme measure, the Ministry or, if the insurance company is an earnings-related pension insurance company, the Council of State may impose restrictions on the concession of the insurance company or withdraw it. The latter method can also be used when a pension insurance company has not, within the given period, been able to take the actions prescribed in the reorganisation plan for restoring the financial soundness of the company, or other measures presented in the short-term financial plan.

As regards statutory pension insurance, it is especially important that an insurance company can meet its insurance liabilities in its long-term insurance relations. For this reason, the provisions of legislation, regulations and instructions issued by the Ministry and the Insurance Supervision Authority serve to secure the insurance company's investments security and yield. Furthermore, they should ensure the realisation and sufficient diversification of investments. The requirement of solidity is also ensured as the Ministry confirms in advance the bases of contributions and bases for calculation of the technical provisions.

In order to meet the supervision requirements of the Insurance Supervision Authority, each insurance company is obliged to annually report its final accounts data to the Authority and present any other accounts of its activities that are important as regards the Authority's supervisory tasks. The Insurance Supervision Authority has the right to inspect the business and other activities of the insurance company and its subsidiary. It may carry out inspections at the premises of an insurance company and participate in the meetings where power of decision is executed. However, it may not take part in the decision-making.

The regulations on the solvency of insurance companies transacting statutory earnings-related pension insurance business were amended at the turn of the year 1996/1997. Then the solvency requirements for insurance companies were raised, and the whole solvency mechanism was reformed. Through the reorganised supervision mechanism, it is possible to intervene in the company's activities earlier than before, and more efficiently safeguard the interests of the insured.

Through the reform, the financing of pensions was changed so that the interest used when calculating the technical provisions may be lowered without the necessity of raising the rate of contribution. In addition, the direct interdependence between the level of return on investments and the level of contributions was removed. The reform improves the prospects of pension insurance companies to take a more market-oriented approach to investment operations, and thus meet the requirements concerning yield and diversification of investments.

7.1.2 Industry-wide pension funds

According to the Friendly Societies' Act, an industry-wide pension fund can be established by one or several founders. The founder shall be a Finnish citizen, a national of another state within the European Economic Area, or a corporation or foundation with a domicile in Finland or in another state in the European Economic Area. A partnership may be a founder on certain conditions. By permission from the Ministry of Social Affairs and Health, a person, corporation or foundation may also be the founder of an industry-wide pension fund.

The purpose of an industry-wide pension fund is to grant pensions to its members or others insured under the pension fund. The membership of an industry-wide pension fund may consist, for example, of employees of one or several employers, or employees of employers belonging to the same group of companies. At industry-wide pension fund meetings, the decision-making power in matters concerning the pension fund is executed by the members of the fund (employees) and the shareholders (employers). The minimum number of members of an industry-wide pension fund is 100-300, depending on the type of activities and pensions granted.

The pursuit of pension fund activities requires approval of the Insurance Supervision Authority with respect to the regulations and related amendments. Furthermore, the pension fund shall be reported for registration to the insurance fund registers within a prescribed time. As regards confirmation of the rules, and amendments thereof, the Insurance Supervision Authority may make it a condition that the industry-wide pension fund acquires sufficient guarantee capital or basic capital. The liabilities under the rules of the industry-wide pension fund are registered as technical provisions which must be covered by the industry-wide pension fund. The premium reserve and claims reserve constitute the technical provisions. The premium reserve is equivalent to the capital value of payments due to future insurance contingencies related to present liabilities and of other related costs less the capital value of future contributions.

For an industry-wide pension fund transacting statutory pension insurance, the reserve for future bonuses and losses intended for maintenance of solvency, is also counted in the premium reserve. As regards an industry-wide pension fund that is also engaged in insurance business other than statutory pension insurance, the liabilities for future increments fulfilling the conditions stipulated by the Insurance Supervision Authority are also counted in the premium reserve. According to the bases this reserve may not be used for covering losses other than those caused by changes of the bases for calculation of the technical provisions.

The claims reserve is equivalent to the outstanding claims incurred under insurance contingencies and to the equalisation amount obtained through risk theoretical calculations for years with a high frequency of accidents.

In its statutory pension insurance activities, the industry-wide pension fund shall follow the bases for calculation of the technical provisions confirmed by the Ministry of Social Affairs and Health. They have to be drawn with special regard to safeguarding the interests of the insured. The industry-wide pension fund shall have a reserve fund which is indicated by the surplus of the final accounts, accumulated as provided by law.

An industry-wide pension fund shall annually submit to the Insurance Supervision Authority its final accounts, the auditors' statement and the minutes of the general meeting of the fund. Moreover, the pension fund shall provide the Ministry and the Insurance Supervision Authority with other necessary information for carrying out the activities regulated by law.

A representative of the Insurance Supervision Authority may at any time inspect the pension fund and be present at the meetings where decision-making power is executed concerning the matters of the pension fund. The representative may also participate in discussions and have remarks that he finds justified recorded in the minutes of the meeting. The actuary of the pension fund shall carry out an actuarial investigation into the state of the pension fund at least every second year.

Should an industry-wide pension fund not observe the law, its rules, or the confirmed bases for insurance or the regulations issued by the Ministry of Social Affairs and Health or the Insurance Supervision Authority on the basis of the Friendly Societies' Act, the Authority should exhort the pension fund to correct the matter within a prescribed time which, unless there are valid reasons, may not exceed six months. This should also take place if the bases of the fund's activities are no longer in accordance with the law. The Insurance Supervision Authority may prohibit the enforcement of a decision of the general meeting, Board of Directors, or Supervisory Board concerning the above-mentioned matter.

To ensure compliance, the Insurance Supervision Authority may impose a fine. If an industry-wide pension fund fails to observe the exhortation or prohibition, the Insurance Supervision Authority may request that the activities be partly closed or that the pension fund be liquidated.

7.1.3 Company pension funds

A company pension fund is established and financed by one or several employers for the purpose of granting pensions and other corresponding employment-related benefits to the members and their dependants. Persons insured with the company pension fund are the members of the pension fund. According to the provisions in the by-laws of the company pension fund, certain other persons may also be members of the fund. A company pension fund may grant optional supplementary pensions and other benefits (A company pension fund) and statutory pensions and other benefits (B company pension fund) or both (AB). Approval of the Insurance Supervision Authority is required for the rules of the company pension fund and the amendments thereof. Moreover, the company pension fund shall be reported for registration in the company pension fund register within a prescribed time.

The company pension fund shall invest its assets profitably and take the fund's liquidity into consideration. A company pension fund may, against security, lend assets to the employer who is charged an interest on this and other debts at least equal to that used for calculating the pension liabilities.

The amount of the pension liabilities based on the rules of the company pension fund must be disclosed in the balance sheet of the pension fund.

In accordance with the instructions of the Ministry of Social Affairs and Health, the pension liabilities concerning statutory pensions shall be calculated on the pensions and other benefits which have started before the closing of the books, future pensions and other benefits of the members of the company pension fund, insofar as the liabilities must be considered to have accrued by the time of the closing of the books, the reserve for future losses and bonuses maintaining the solvency required by the Employees' Pensions Act, and liability due to future increases in voluntary supplementary pensions and other benefits. If the assets of the company pension fund are insufficient to cover the pension liabilities and other liabilities, the difference must be disclosed in the balance sheet as liabilities deficit.

A company pension fund granting voluntary supplementary pensions (A and AB company pension funds) shall cover its pension liabilities for voluntary, supplementary pensions and other benefits to their full extent. The transitional period for coverage should last until the end of 2010, however. Of the pension liabilities cover due to voluntary supplementary benefits, 75 per cent should be those assets and liabilities that are accepted as cover for pension liabilities arising from activities under the Employees' Pensions Act. There are separate provisions on assets acceptable as cover.

The Insurance Supervision Authority may grant a temporary exemption from the liability of full coverage of the optional supplementary benefits where under the rules of a company pension fund to be registered after enforcement of the Act, employment completed before establishment of the pension fund shall be counted towards the pension.

A company pension fund must annually submit to the Insurance Supervision Authority its final accounts, a statement of the auditors and a statistical report on its activities. In addition, the company pension fund shall submit to the Ministry of Social Affairs and Health or the Insurance Supervision Authority, within a prescribed reasonable time, other data on its activities prescribed by law.

The Insurance Supervision Authority may at any time inspect the company pension fund, and participate in meetings where decisions are made. However, it may not take part in the decision-making. The Insurance Supervision Authority may also request a special investigation. An actuary of the company pension fund shall carry out an actuarial investigation of the state of the company pension fund at least every second year.

The Insurance Supervision Authority supervises the activities of the company pension funds. If a company pension fund does not obey the law, its rules or the provisions issued by the Ministry of Social Affairs and Health or the Insurance Supervision Authority by virtue of the Act on Company Pension Funds, the Insurance Supervision Authority shall ask it to correct the matter within a prescribed time. The Insurance Supervision Authority may prohibit the execution of a decision given by the Board of Directors or another administrative body. To ensure compliance, it may impose a fine. Should the prohibition or exhortation not be obeyed, the Insurance Supervision Authority may order partial dissolution or total liquidation of the company pension fund. If the Insurance Supervision

Authority considers that a company pension fund is in, or is getting into such a state that it should be dissolved, it can prevent the fund from giving up or pledging its assets.

7.1.4 Foreign insurance companies

A foreign insurance company whose home state belongs to the European Economic Area (a foreign EEA insurance company), or a foreign insurance company whose home state does not belong to the European Economic Area (a third country insurance company), may not engage in statutory pension insurance in Finland under the Employees' Pensions Act or the Self-Employed Persons' Pensions Act. Such pension insurance may only be transacted by a Finnish insurance company referred to in the Act on insurance companies transacting earnings-related pension insurance.

A foreign EEA insurance company may pursue insurance business in Finland either on the basis of the right to establishment or on the right to free supply of insurance services. A foreign EEA insurance company does not have to apply for a special concession in Finland, but a concession issued by the supervisory authorities of the company's home state is also sufficient for activities carried out in Finland. Supervision of a foreign EEA insurance company is not a task of the Insurance Supervision Authority, but rests with the authorities of insurance supervision in the home state of the insurance company.

A third country insurance company whose home state does not belong to the European Economic Area may not engage in insurance business in Finland without a concession from the Ministry of Social Affairs and Health. For its business activities in Finland, an insurance company of a third country has to establish a representative office in Finland, led by a general agent approved by the Ministry of Social Affairs and Health. The general agent may also be a Finnish insurance company.

A foreign third country insurance company engaged in voluntary pension insurance must have assets of at least FIM 14 million in Finland. The Insurance Supervision Authority may, on the company's application, accept a smaller basic capital depending on the scope and kind of business. The basic capital should amount to at least half of the prescribed amount, however.

A foreign third country insurance company must calculate the technical provisions for its direct insurance business in Finland. They consist of the premium reserve and the claims reserve. The technical provisions must be covered just as those of Finnish insurance companies.

A foreign third country insurance company must draft an annual report of its activities and the state of the company in Finland, a report on the calculation of the technical provisions and an analysis of its insurance business. In addition, the Insurance Supervision Authority may inspect the business and other activities of a foreign third country insurance company and its subordinated company.

Like a domestic insurance company, a foreign insurance company must comply with good insurance practice in its insurance business in Finland.

If a third country insurance company fails to observe the law, the scope of its licence, its Articles of Association or rules, or to conform to the bases approved for the insurance business, or regulations or provisions issued on the basis of the legislation on foreign insurance companies in Finland, the Insurance Supervision Authority may issue a complaint to the foreign insurance company, instruct it to correct the matter within a prescribed time, or prohibit the company from continuing activities considered erroneous by the Ministry of Social Affairs and Health or the Insurance Supervision Authority. The prohibition or exhortation can be made more effective by a fine. If the exhortation or prohibition is not obeyed, the Insurance Supervision Authority may prohibit the company from issuing new insurance policies until the matter has been corrected.

7.2 The contents of pension insurance

The contents of the statutory pension system are defined in the specific pension acts. There are no differences between pension institutions regarding the contents of the pension cover. In addition, the conditions and bases for pensions must be confirmed by the Ministry of Social Affairs and Health.

The bases describe the calculation of contributions and underwriting, paid-up pensions and surrender values, and the consequences of failure to pay contributions. They also describe the rights of the policyholder when a policy ceases to be in effect for a reason other than surrender before expiry of the period of insurance agreed on, or in cases where the company is relieved from its liabilities for some other reason. When determining the bases for calculation of the contributions and the technical provisions, primary consideration shall be given to safeguarding the benefits of the insured, i.e. ensuring that the company is able to meet its future pension payments (the principle of solidity). When determining other bases, primary consideration shall be given to the moderation of the bases (the principle of moderation). The bases of contributions may encompass factors related to the insured affecting the liability of the insurance company, as for instance the difference in the average life spans of men and women. Without special reasons, there may be no differences in the bases separately confirmed for each company, which may cause difficulties in handling the pension institution's joint affairs under the acts on earnings-related pensions.

Variations in the price of insurance between different companies are to be found in the size of the supplementary benefits. The accrued surplus is credited to the policyholders through the reserve for future losses and bonuses. For large employers experience rating is used as regards disability and unemployment pensions. Thus, the contribution of these companies is based on the company's own disability and unemployment expenditure, and to that extent it is independent of the chosen insurance company, or on whether the pensions have been arranged in a company pension fund or an industry-wide pension fund (c.f. section 4.2.4).

As concerns pension insurance companies, the conditions and bases are confirmed separately. As concerns company pension funds and industry-wide pension funds, the type, qualifying conditions, amount or determination of their pension and other benefits must be stated in the rules of the pension institution, which are subject to confirmation by the Insurance Supervision Authority.

The contents of the conditions for voluntary pension insurance of a domestic insurance company are not regulated. A foreign third country insurance institution must enclose a plan of action with its application for a licence. The plan of action shall contain a description of the types of insurance that the company intends to engage in, and a description of the bases for calculation of the technical provisions. Furthermore, the bases for calculation prescribed in the Insurance Companies Act are applied to a foreign third country insurance company.

Possible voluntary supplementary benefits granted by a company pension fund and industry-wide pension fund appear in the confirmed rules, in the same way as for statutory mandatory benefits.

8 THE PROSPECTS OF THE STATUTORY EARNINGS-RELATED PENSION SCHEME

As a result of the gradual maturation of the statutory earnings-related pension scheme, pension expenditure will grow for a long time, and will reach a level of more than 30 per cent by the year 2030. The scheme has undergone amendments in order to hold down the growth of pension expenditure due to the depression during the 1990s. The major question for the pension scheme as regards the future is how it should adapt to the ageing of the population, especially if unemployment remains high, and early retirement pensions are seen as alternatives despite the reforms.

The statutory earnings-related pension scheme affects the national economy through both its benefits and the financing of these. The pension contributions are part of the labour costs and influence the competitive capacity of enterprises. The investment of pension funds are trusted to increase domestic employment and the wage bill, which will thus reduce the proportional share of the pension expenditure in the national economy.

8.1 The increase in statutory earnings-related pension expenditure

In 1997 the expenditure on statutory earnings-related pensions in the private sector amounted to FIM 33 billion. This was 43 per cent of the nation's total pension expenditure, 56 per cent of all statutory earnings-related pension expenditure, 19 per cent of the earned income, and 5.3 per cent of the GDP. The nation's total pension expenditure includes expenditure on private-sector and public-sector statutory earnings-related pensions, pension expenditure under the Military Injuries Act, Motor Insurance Act, and the Accident Insurance Act, special pensions for farmers and national pensions.

As a result of the phased-in maturation of the statutory earnings-related pension scheme, pension expenditure will continue to rise for a long time. Improvement in the pension level of the 1970s and 1980s and new types of benefits have contributed to the rapid growth in expenditure. The reforms in the 1990s, on the other hand, hold down the growth of future pension expenditure. The level of private-sector pension expenditure will, by estimation, increase to one and a half times the present level, and will exceed a level of 30 per cent in 2030.

Even though public-sector pension benefits have been harmonised with private-sector benefits, public-sector[6] pension expenditure will remain higher than that of the private sector in proportion to the wage bill for a long time. On the other hand, the pension expenditure percentage rises more slowly than in the private sector.

When the national pension also became a guarantee pension, which is only granted if the employee gets no statutory earnings-related pension or if that pension is very small, the total pension expenditure in proportion to the wage bill will not rise by more than 6 percentage points by the year 2030. The increase is below 0.2 percentage points a year on average. Due to the phased-in maturation of the scheme, the increase is strongest in the private sector. Table 3 contains an assessment of the development of pension provision until the year 2030, based on present legislation.

6 The incorporation of pension institutions by the State in the 1990s, also contributes to the high pension expenditure of the public sector. Pension liabilities incurred until the incorporation remain in the public sector. After the incorporation the accrued pension and the wage bill belong to the private sector.

Table 3. Statutory pensions as percentage of wages in 1996, 2010 and 2030.

Pension scheme	1996	2010	2030
Statutory earnings-related pensions	21.6 %	27 %	34 %
Private sector	19.1 %	24 %	32 %
Public sector	27.5 %	36 %	38 %
Accident insurance and other such pensions	1.3 %	1 %	1 %
National pensions	7.6 %	4 %	3 %
All pensions	30.5 %	32 %	37 %

In the table, the pension expenditure of each pension scheme has been compared to the wage bill of the same scheme. The real growth of productivity is assumed to be two per cent a year. Over a 5-year period this is the slowest growth in productivity since 1960. The growth of the earnings level is also assumed to be two per cent a year. The number of employed persons has been assumed to grow by about ten per cent by the year 2010, after which it will drop by almost eight per cent by the year 2030. The number of persons employed in the public sector, however, is expected to diminish during this period by 3 per cent altogether. Figure 14 contains an account of the development of pension expenditure from the 1960s, and an assessment of future development. The steep rise of unemployment at the end of the 1980s and the beginning of the 1990s contributed to the sharp increase in pension expenditure, since it reduced the wage bill on which pension expenditure is based.

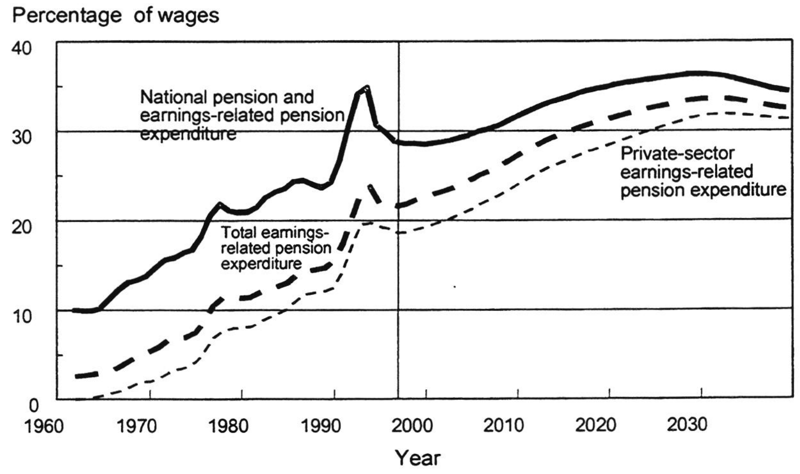


Figure 14. Development of pension expenditure by the year 2040

8.1.1 The principal factors that have influenced the development of the statutory earnings-related pension scheme

In the 1960s and 1970s, all available resources were used for developing the structure of the pension scheme. The most important reform took place in 1975 when the accrual rate of the statutory earnings-related pension was changed from one per cent to 1.5 per cent and the target level from 42 per cent to 60 per cent.

In the 1980s the pension benefits were improved. The reforms were largely a consequence of the labour market situation, and pressure to lower the retirement age. The lower age limit for an unemployment pension was lowered six times; a gradual lowering from 60 to 55 years. From the point of view of the pension system, this temporary lowering of the age limit has had a detrimental influence on people's expectations as regards the retirement age, since people have begun to consider 55 as a possible retirement age.

The situation was clarified when flexible arrangements concerning retirement age were introduced at the end of the 1980s. It was then decided that when awarding early retirement pensions, the emphasis should be on the state of health and ageing of the individual, not on the labour market situation. At the same time as the new types of benefits were introduced (i.e. early retirement pension, early old-age pension and part-time pension), it was agreed that the lower age limit entitling to an unemployment pension would be gradually raised to 60 years, and that the treatment of unemployment is primarily the task of labour policy.

At the end of the 1980s, certain age groups were entitled to both an individual early retirement pension and an unemployment pension before the age of 60. This can be seen in the statistics as a record number of persons having retired. At the beginning of the 1990s, the average retirement age was only about 58 years, and a goal was set for the entire social policy to develop measures that would promote the maintenance of work capacity and continued participation in working life. At the beginning of the 1990s, fears of an impending labour shortage affected the steps taken. In order to reach the goal both the "carrot and stick " methods were used, and the measures had both an increasing and reducing effect on pension expenditure. The recession of the 1990s, high unemployment and doubts about the long-term condition of the national economy, contributed to the new long and short-term amendments made in the scheme. These were primarily intended for holding back pension expenditures.

The most central changes due to the two large pension reforms in the 1990s were the introduction of the employee's pension contribution and the deduction of the contribution in the gross wage when determining the pensionable earnings and index basis, and the reform by which public-sector pension benefits were made uniform with private-sector benefits. The retirement age in the public-sector was raised from 63 years to 65 years, the annual pension accrual rate was lowered from 2.2 per cent to 1.5 per cent, and the maximum level of the pensions was lowered from 66 per cent to 60 per cent.

Savings in pension expenditure were also sought in the index change and in the reform of calculation of the pensionable wage. In the index adjustment for those over 65, consumer prices were emphasised, and in the calculation of pensionable wage the ten last years of the employment are taken into consideration compared to the previous four years. Moreover, the basic amount of the national pension previously granted to everybody was removed, and the national pension became a guarantee pension, which is awarded only if the person does not get any earnings-related pension at all, or if it is very small. Measures promoting continued participation in working life included increased pension accrual for ageing employees, lowered post-contingency accrual for disability, unemployment and survivors' pensions, measures promoting rehabilitation, raising the age limit for individual early retirement pensions, and lowering the age limit for part-time pension.

At the beginning of the 1990s statutory earnings-related pension expenditure was expected to rise to 41 per cent by the year 2030 in proportion to the wage bill. The rise is expected to slow down after the reforms so that the ratio will be approximately 33 per cent by the year 2030.

8.2 Financial outlooks

The pension contribution constitutes an important part of the indirect costs of the employers. Since it has not been possible to raise the employers' pension contribution to the prescribed level due to the recession in the 1990s, special measures to slow down the rise in the contribution level had to be taken.

The employers' part of the contribution was significantly changed in 1993 when the employees' contribution was introduced, which, as it grows, will slow down the increase in the employers' contribution. The reforms implemented in the 1990s are expected to achieve a balance between the pension benefits and pension contributions, both in a short- and long-term perspective. However, this requires moderate, continued increments in contributions. The biggest question as regards the future of statutory earnings-related pension insurance is how the pension system will adapt to the ageing population. The age structure in Finland will be more favourable than in other industrial countries until the turn of the millennium. After the year 2010, however, the number of pensioners will grow faster in Finland than in most other industrial countries. This trend presents a serious challenge for the financing of pension schemes. In the private sector preparations for a rise of the contribution level due to the ageing population have been made, as it will be possible to reduce that component of the premium by which funds are accumulated. In the public sector funding was begun only in 1988-90, and it has been estimated that funded assets will be used during the next decade for financing pension expenditure.

The problem with the ageing population will be accentuated if unemployment remains at the same level and early retirement is as popular as it was at the beginning of the 1990s. Moreover, it has been suggested on several occasions that ageing employees should retire in order to reduce youth unemployment. Measures like these will increase early retirement, disturb the balance between earnings-related pension benefits and contributions achieved by the reforms in the 1990s, and will lead to a situation where problems related to unemployment security are handled through the pension scheme. The statutory earnings-related pension, however, is based on long-term perspective spanning over generations. It is important for the credibility and durability of the statutory earnings-related pension scheme that agreements and decisions are not altered due to short-sighted, political goals foreign to the pension system.

The introduction of the statutory earnings-related pension cover in private sectors will continue until the millennium, and will also have an impact on the growth of pension expenditure. The risk factors related to the future development of the economy have increased, and the level of interest has fallen.

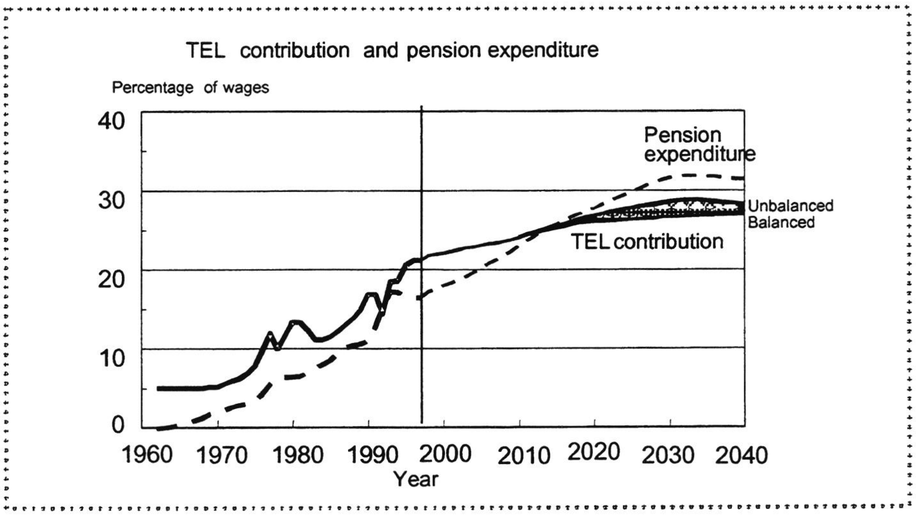
The reforms of the 1990s continued in 1997, when the financing methods of the employees' statutory earnings-related pension schemes were revised. The long-term aim of the reform is to reduce fluctuations and the need to increase the earnings-related pension contribution. As a result of the reform, inflation and changes in the calculated interest rate no longer directly influence the level of contributions. Improvements were also made with respect to maintenance of the effective value and profit conditions of funds.

The premium income of the private sector was about FIM 34 billion in 1997, i.e. at the same level as statutory earnings-related pension expenditure. This is 20 per cent of the wages and 5.5 per cent of the GDP. In 1997 there was FIM 200 billion in the private-sector funds for statutory earnings-related pensions, registered supplementary pensions included. This is 80 per cent of the statutory pension funds of the whole nation.

During the last five years the share of the private sector in the earnings-related pension funds has decreased by about ten percentage points as the public sector started building earnings-related pension funds at the beginning of the 1990s. Consequently, the share of the private sector will get somewhat smaller in the future.

Calculations of earnings-related pension contributions are generally presented only for TEL. More than half of all the insured individuals and 90 per cent of the private-sector employees are covered by TEL. TEL is a framework act whose principles are mainly followed in the other pension acts.

Correspondingly, the TEL contribution is authoritative, and in public discussion, mention of pension contribution often refers to the TEL contribution. Figure 15 shows the development of the TEL contribution and expenditure, the statutory earnings-related pension funds of private-sector employees since the 1960s, and a calculation of future development until the year 2040.



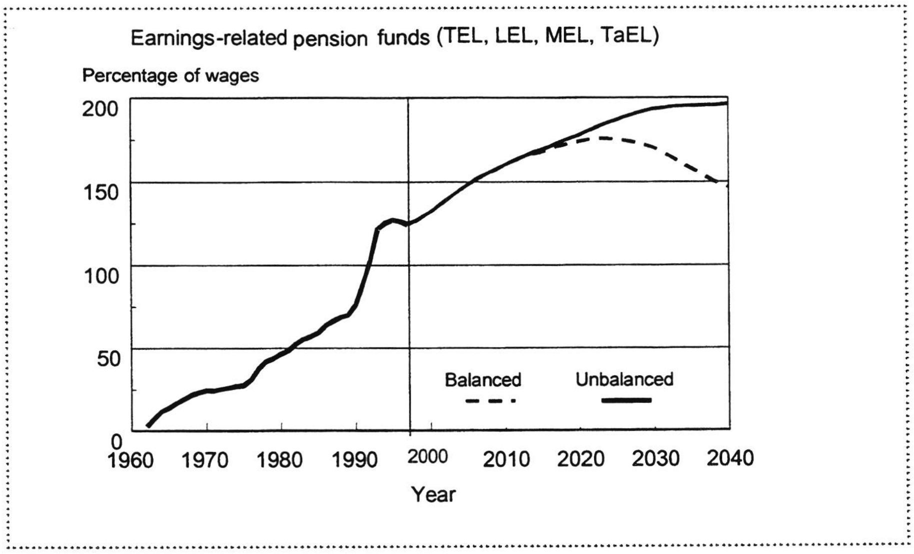


Figure 15. The TEL contribution and expenditure and the funds under the pension acts of private-sector employees

The average TEL contribution in 1998 is 21.5 per cent and the funds according to the earnings-related pension acts of the private-sector employees amount to over 130 per cent of wages. By this trend, and according to the present legislation, the level of the TEL contribution will be about 29 per cent in 2030, and the funds under the private-sector Employees' Pensions Act will be almost the double in relation to the wage bill.

In the assessment, real growth of annual income level has been estimated at two per cent, inflation at 2.5 per cent a year, and the real calculated interest rate of the pension institutions has been estimated to be three per cent. However, the contribution is presented so that the increase in contribution due to ageing of the population will be equalised after 2010 by reducing the contribution component which is used for accumulating funds. Then the contribution will grow to about 27 per cent in the year 2030, and the funds to about 170 per cent of wages. The average increase of the contribution is then only about 0.15 percentage points a year, and the total increase is six percentage points. The total increase of both employer's and employees' contribution is thus about three per cent.

In the assessment, the birth rate has been expected to be smaller than the present growth of the population, which means that the calculation depends on the new generation always being smaller than the previous one. This means that the so-called baby boomers' exit from working life will not significantly affect the contribution level, and the payment burden will remain permanently at a higher level than if the birth rate was at replacement level of the population.

If the birth rate matches the replacement level of the population at the beginning of the millennium, the contribution level could be made permanent at a level of 25 per cent from the year 2015. Correspondingly, deferment of retirement by three years would give a 4-5 percentage points lower level of contribution, but an average increase in life expectancy by three years would lead to a 4-5 percentage points higher level of contribution.

In addition to the demographic risk factors, the future average economic growth might also differ from the expected. If the annual real growth rate of the income level was 0.5 or 3.5 per cent instead of two per cent, the contribution would be 2-3 percentage points higher or lower in the year 2030.

8.3 Position of the statutory earnings-related pension scheme in the national economy

Like the other social benefits, the statutory earnings-related pension scheme influences the national economy both through the benefits and the financing of these.

The benefits influence the supply of labour, consumption and income distribution. Financing also affects the income distribution since the chosen financing system influences savings and investments in national economy.

In 1996 the private-sector statutory earnings-related pensions and their financing made up 5.7 per cent of the gross domestic product at market prices. The total pension expenditure in Finland was 13.5 per cent of the gross domestic product. Of the households' income, the pension income is about 20 per cent.

The stage of introduction of the Finnish statutory earnings-related pension scheme of the private sector has already taken 35 years, and will take another 35 years before the pension scheme is fully effective, i.e. the work of all retirees has been covered by the pension acts since the year 1962.

The fact that the scheme attains maturity slowly has made it significantly easier for the national economy to adapt to such a large system of income distribution. On the other hand it means a continuous, though slow, growth of the income share to be used for pension expenditure.

The central participation of the labour market organisations in the administration of the pension scheme has made it easier to adapt to pension expenditure. A good example of this consensus is that even during the deep recession in Finland at the beginning of the 1990s, agreements could be made on the financing of pensions and how they should be adjusted to the shrinking income basis.

The statutory collective pension cover relieves the individual from personal pension saving, but at the same time it forces employers to take out pension insurance. The pension contributions are part of the labour costs and influence the competitive capacity of companies.

The Finnish statutory earnings-related pension scheme is partly funded, so all contributions have not been needed for payments of pensions during the phase of inception. The principle has been that the component of the contribution which is not used for the payment of pensions is refunded as loans to those private enterprises from which it has been claimed. This method of premium lending has increased investment possibilities for enterprises, but, on the other hand, has also increased the extent to which enterprises are indebted. Since the Finnish national economy has opened up for international competition, there have been changes in the market, which have also brought changes to the operational environment of the statutory earnings-related pension scheme. The strengthening of the position of enterprises and the lowered interest rate has made the premium loans offered by the pension institutions more market-oriented. At the same time the importance of automatic premium lending has been reduced, and the investment structure of pension funds has changed.

As regards the financing of the employees' pension cover, the private-sector pension system is economically self-sufficient and independent of the State. The only exception is the Seamen's Pension Act, which has traditionally been partly financed by the State. The large share of the contributions in labour costs has, however, made the annually confirmed contribution a central parameter in economic policy, and has also created a growing interest at government level towards the private-sector pension benefits and expenditure. The statutory nature of the private sector earnings-related pension scheme has also meant that despite its autonomy, it has been considered part of the public sector in national economy book-keeping.

As the amount of pension expenditure and the funds accrued from contributions have grown, the interest towards the mandatory earnings-related pension cover and its importance as regards the national economy have increased all the time. Since the end of the 1970s, the portion of the earnings-related pension saving or the net saving of the whole national economy has varied between 20 - 30 per cent. This is a very large portion, despite the fact that funding has been fairly moderate.

When, at least in principle, it is possible to influence the direction of economic policy with the help of pension contributions, the State will most probably also try to use the financing of the statutory earnings-related pensions as one instrument in economic policy in the future. The permanent funding of statutory earnings-related pensions is justified, since the pension benefits reduce the need for private saving. During the next few years, it would also be justified to keep pension funding at least at the present level. One reason for this is that the age structure of the population will change dramatically after the year 2010, when the "baby boom" generation born after the Second World War will retire. By the yield on funds it will be possible to ease the growing pension burden. From the point of view of the pension system, it would also be desirable that the fund investments would increase domestic employment and the wage bill, reducing the proportional share of the pension expenditure in the national economy. This is difficult to secure with the growing internationalisation of the economy, however, and higher demands than before will be made on the yield on pension investments.

Attempts to increase the investments in shares will be made by improving the solvency of the pension institutions during the next few years. The role of the pension institutions in the national economy will thus become more active as the structure of investments changes from lending to shareholding.

9 STATISTICS

9.1 Some general data on Finland

Population:

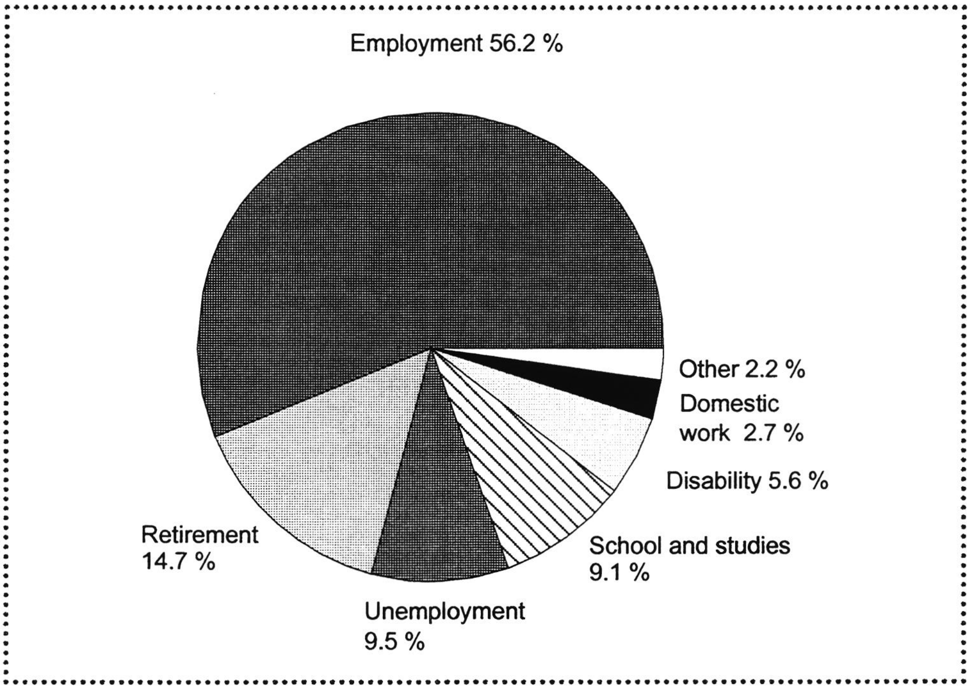
Population 31.12.1997: 5 147 349.

Population by age group as %, 1997 - 2030

Age group	1997	2000	2010	2020	2030
0 - 14	18.7	18.1	16.3	15.9	15.5
15 - 64	66.7	67.0	66.5	61.5	58.8
65 -	14.6	14.9	17.1	22.5	25.7
All	100.0	100.0	100.0	100.0	100.0
Rate of population growth, % compared to the previous year	0.3	0.2	0.1	0.0	-0.2

Rate of population growth 1.99 % between 1997 and 2030
Source: Statistics Finland

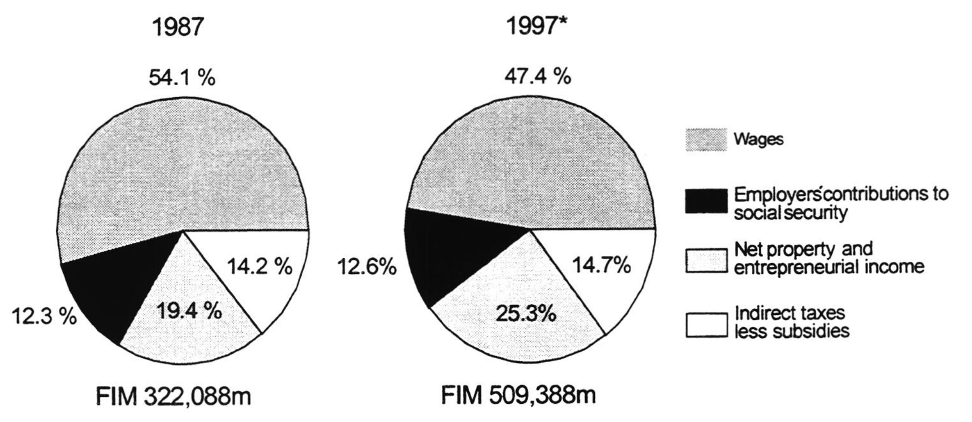
Population aged 15-74 by activity 1997*



* Preliminary figures
Source: Statistics Finland

Economy:

National income 1987 and 1997*



Tax rate 1997*

	FIM million	as % of GDP
All taxes 1)	292 126	47.3
State taxes	150 362	24.3
Income and property tax	50 200	9.7
Value added tax	51 451	8.9
Municipal taxes	65 437	10.6
Social security funds	75 387	12.2
European Union	940	0.2

1) Accumulated taxes according to OECD statistics

* Preliminary figures
Source: Statistics Finland

Social security:

The gross domestic product and social security expenditure, 1988 - 1997

	Gross domestic product Current rates FIM million	Price level of 1997 FIM million	Change %	Social security expenditure Current rates, FIM million	Price level of 1997 FIM million	Change %	Social sec. expenditure/ GDP %
1988	434 341	547 710	4.9	105 669	135 436	3.8	24.3
1989	486 998	578 755	5.7	116 051	139 518	3.0	23.8
1990	515 430	578 830	0.0	131 517	149 116	6.9	25.5
1991	490 868	537 931	-7.1	149 225	162 426	8.9	30.4
1992	476 778	518 831	-3.6	163 921	174 005	7.1	34.4
1993	482 397	512 731	-1.2	170 771	177 547	2.0	35.4
1994	510 992	536 055	4.5	176 887	181 901	2.5	34.6
1995	549 863	563 175	5.1	179 829	183 063	0.6	32.7
1996	576 922	583 395	3.6	185 385	187 639	2.5	32.1
1997*	618 042	618 042	5.9	187 900	187 900	0.1	30.4

Financing of social security expenditure, 1997*, %

The State	Municipalities	Employers	Persons insured	Returns on reserve funds	Total
26.4	17.0	36.5	13.1	7.0	100.0

* Preliminary figures
* Source: The Ministry of Social Affairs and Health

Social security expenditure by major items, 1997*, %

Sickness and health	21.5
Disability	14.4
Old-age	29.2
Surviving spouse and near relatives	3.9
Families and children	12.1
Unemployment	12.6
Housing	1.2
Other	2.3
Administration	2.9
Total	100.0

* Preliminary figures
Source: The Ministry of Social Affairs and Health

Employed and unemployed persons 1986 - 1997

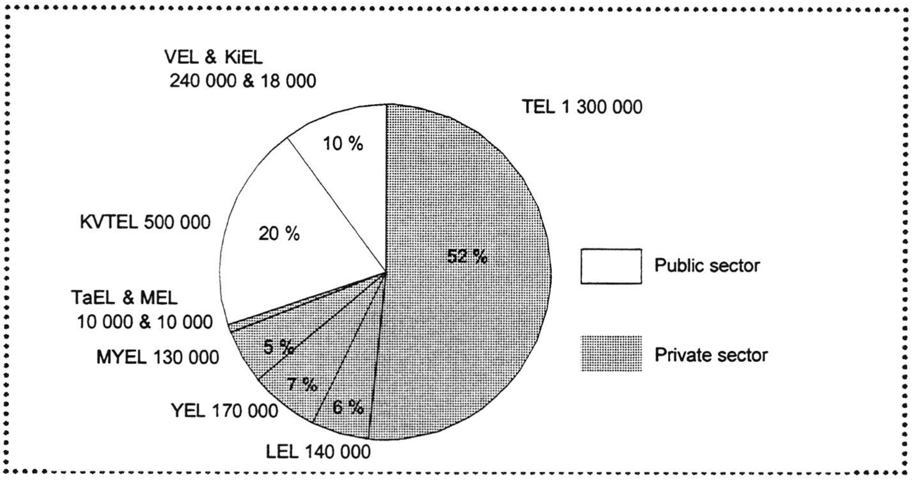
	Employed persons	Unemployed	Unemployment rate
1986	2 431 000	138 000	5.4
1987	2 423 000	130 000	5.1
1988	2 431 000	116 000	4.5
1989	2 470 000	89 000	3.5
1990	2 467 000	88 000	3.4
1991	2 340 000	193 000	7.6
1992	2 174 000	328 000	13.1
1993	2 041 000	444 000	17.9
1994	2 068 000	456 000	18.4
1995	2 068 000	430 000	17.2
1996 1)	2 127 000	400 000	15.8
1997 *	2 170 000	367 000	14.5

1) According to a labour market investigation of 1996
* Preliminary figures
Source: Statistics Finland

9.2 General data on the Finnish pension system

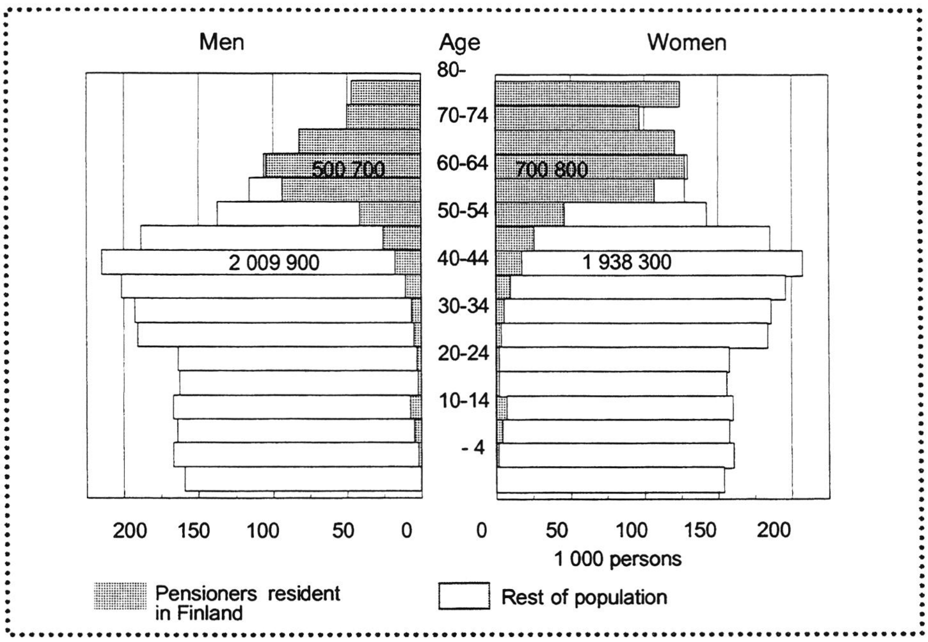
Persons insured, population and pensioners:

Population insured under a pension act in 1997*



The figures refer to those in employment during the year. Simultaneous coverage by several employment pension acts is possible.

The age structure of the whole population and the pensioners at 31.12.1997*



* Preliminary figures

Proportion of pensioners resident in Finland

	All 1) Number	Share of population %	Aged 55-64 Number	Share of population, %
1987	1 044 300	26.6	288 700	55.6
1989	1 071 100	27.1	290 700	56.8
1991	1 091 000	27.3	285 800	56.1
1993	1 114 400	27.6	288 700	56.2
1995	1 134 000	27.8	282 800	55.1
1997*	1 140 200	27.7	272 700	51.8

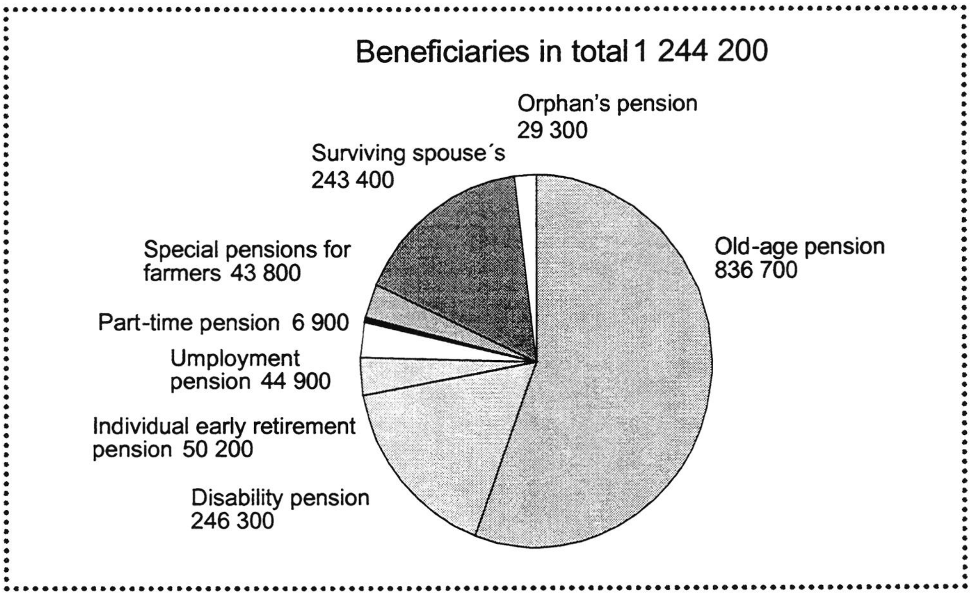
1) Pensioners over 16

All beneficiaries by pension scheme at 31.12.1997*

	All
Recipients of earnings-related pensions	1 119 500
Private sector	962 300
Public sector	409 600
Earnings-related pension, only	135 600
Recipients of national pension (KELA)	1 108 700
National pension, only	124 800
All pensioners	1 244 200

* Preliminary figures

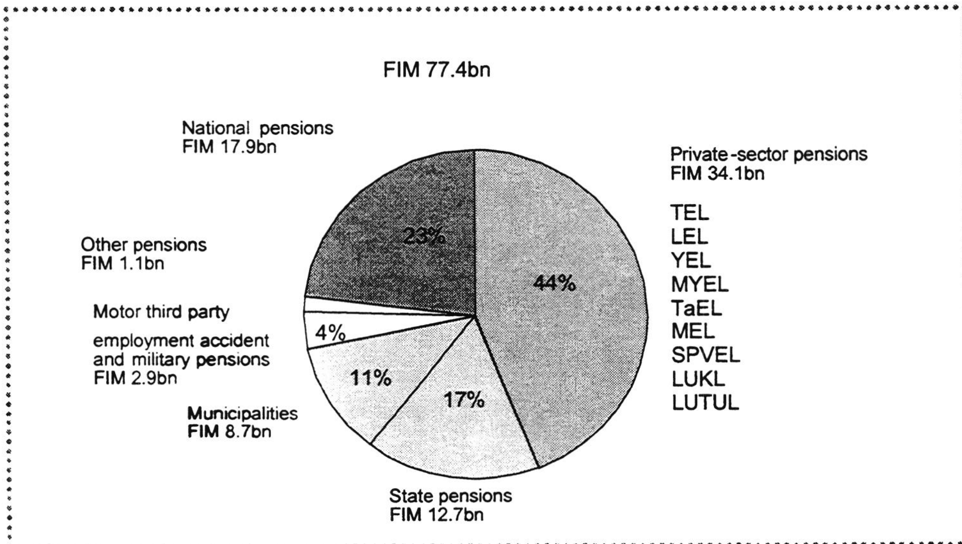
All beneficiaries by pension benefit at 31.12.1997*



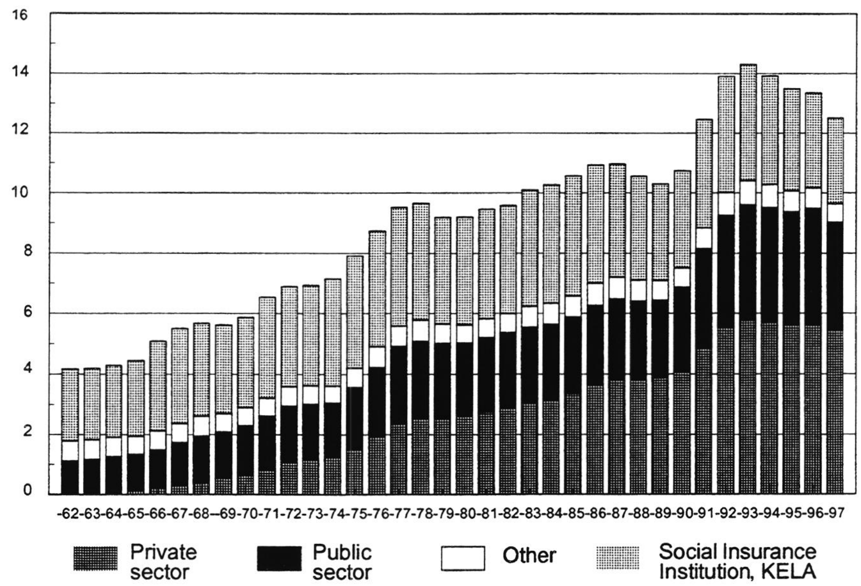
A person may simultaneously receive pension under several pension acts.

Pension expenditure:

The total pension expenditure by pension act in 1997*



The share of the total pension expenditure of GDP 1962 - 1997*



Total pension expenditure 1990 - 1997*

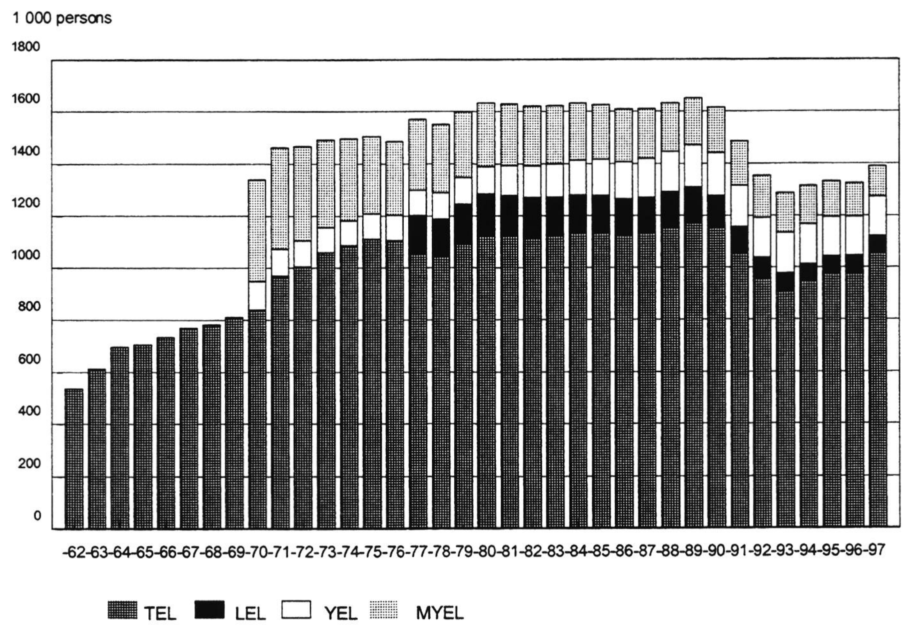
	Total pension expenditure FIM million	Share of social security expenditure %
1990	56 900	43.3
1991	62 700	42.0
1992	67 610	41.2
1993	70 030	41.0
1994	72 240	41.0
1995	74 900	41.7
1996	78 100	42.1
1997*	78 800	42.1

*Preliminary figures

9.3 The pension system of the private sector

Persons insured, pensioners:

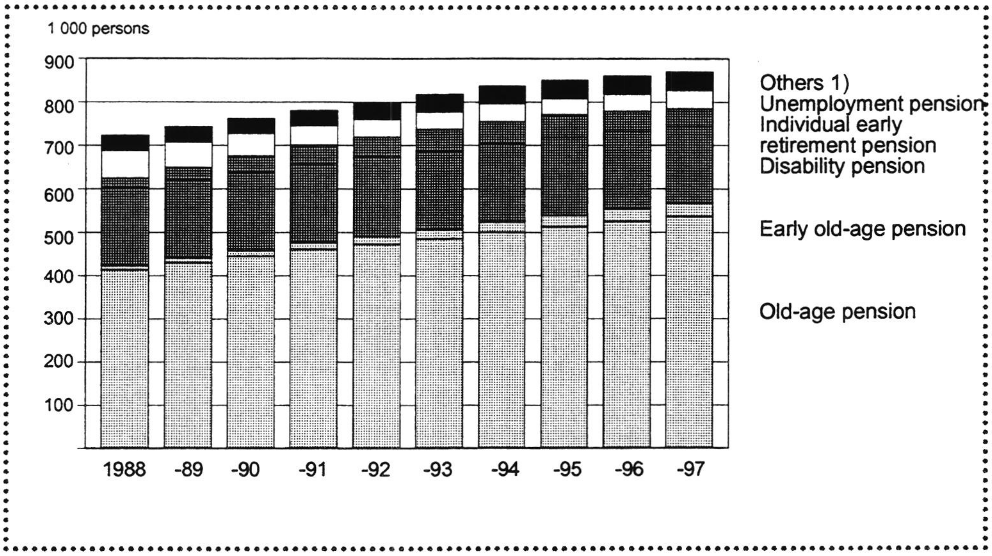
Number of insured persons 1962 - 1997



Population insured under a pension act at year-end 1997

	Pension acts on earnings-related pension				Self-employed persons' pensions acts		Total
	TEL	LEL	TaEL	MEL	YEL	MYEL	
1997	1 028 000	78 000	8 000	7 000	154 000	122 000	1 370 000

Pensioners by pension benefit 1988-1997

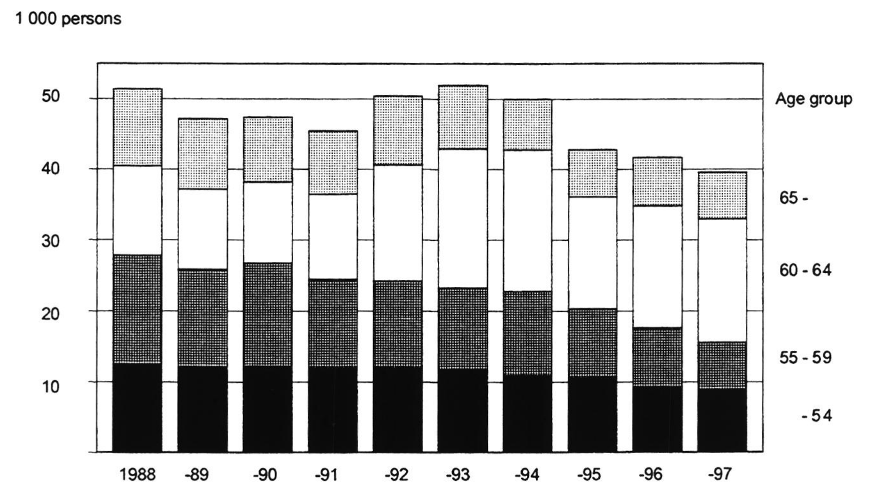


1) Part-time pension, war veteran's early retirement pension and special pensions for farmers

Pensioners by pension act at year-end 1997

Act	All	Under 65
TEL	490 800	178 800
LEL	111 500	45 800
YEL	64 100	19 800
MYEL, SPVEL, LUKL, LUTUL, LUEL	199 100	41 900
MEL	4 300	3 000
TaEL	600	300
All	870 300	289 600

Population having retired on a pension, by age 1988-1997



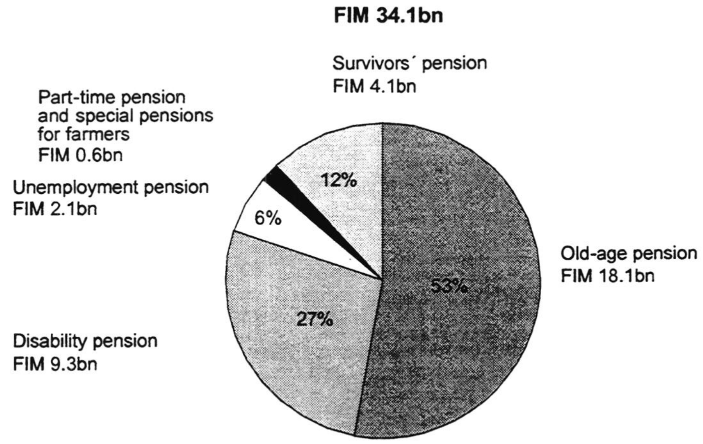
Pension expenditure, premiums written:

Pension expenditure FIM million by pension act, 1997

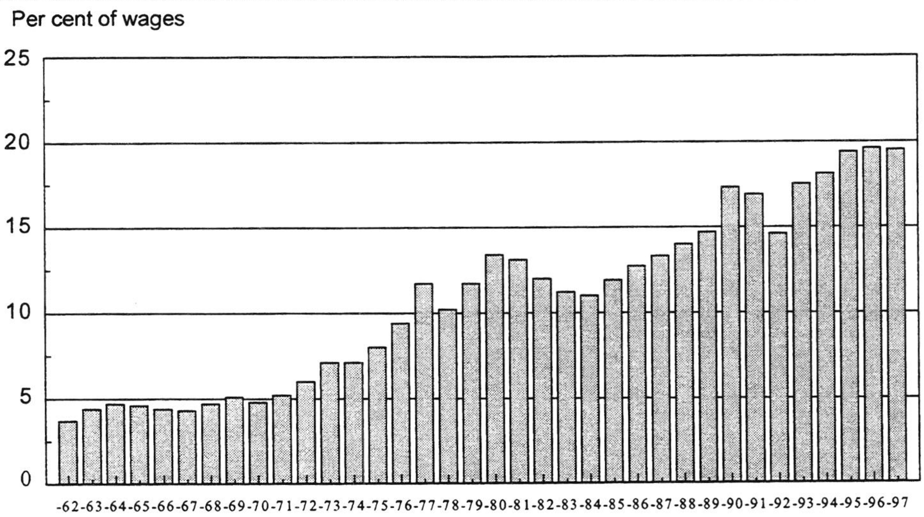
	Earnings-related pension acts				Self-employed persons' pensions acts		Total
	TEL	LEL	TaEL	MEL	YEL	MYEL	
1997	24 148	3 386	14	403	2 893	2 733	34 122*

*Includes special pensions for farmers FIM 546 million

Pension expenditure by pension benefit in 1997



Premiums written (incl. supplementary pensions) as % of wages 1962 - 1997

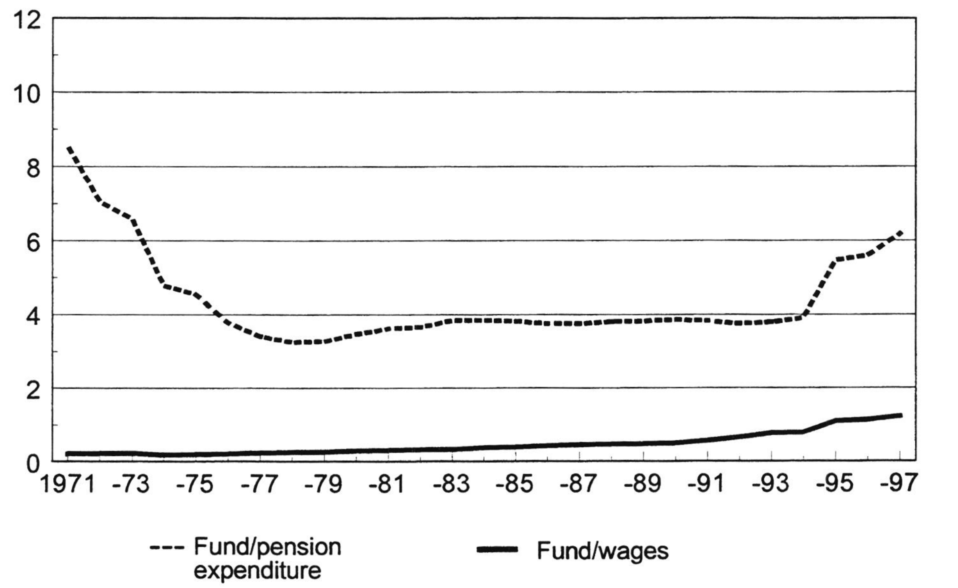


Premiums written (incl. supplementary pension) by pension act 1997, FIM million

	Earnings-related pension acts				Self-employed persons' pensions acts		Total
	TEL	LEL	TaEL	MEL	YEL	MYEL	
1997	28 214	1 921	105	267	2 311	754	33 572

Funds:

Proportion of the fund to pension expenditure and the wage bill 1971 - 1997

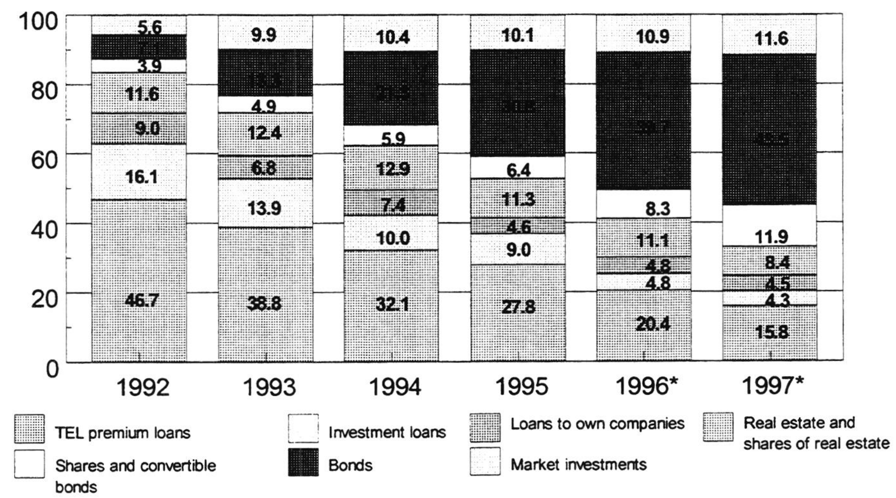


Funds FIM million and % of the wage bill in 1997

	Earnings-related pension acts								Self-employed persons' pension acts				Total	
	TEL		LEL		TaEL		MEL		YEL		MYEL			
	FIM	%	FIM	%	FIM	%	FIM	%	FIM	%	FIM	%	FIM	%
1997	180 236	105	17 419	10	395	0.2	2 029	1.2	934	0.5	129	0.1	200 079	116

Investment:

The investment portfolio of earnings-related pension institutions as % 1992 - 1997 (private sector / all member institutions)



* Includes investments in foreign currencies

Administration:

Number of pension institutions 1962 - 1997

	TEL Ins. comp.	Company pension funds	Industry-wide pension funds	**LEL** Employment Pensions Fund	**TaEL** Pension fund for performing artists	**MEL** Sailors' pension fund	**YEL** Self-employed persons' pension fund	**MYEL** Farmers' pension institution	**All**
1962	9	16	3	4	-	1	-	-	33
1967	9	147	10	4	-	1	-	-	171
1972	8	126	13	4	-	1	13	1	153
1977	8	107	12	1		1	13	1	130
1982	8	88	12	1	-	1	13	1	111
1987	7	78	12	1	1	1	12	1	101
1992	7	54	11	1	1	1	12	1	77
1996	7	43	8	1	1	1	11	1	62
1997	6	42	8	1	1	1	10	1	60

Administrative costs of the pension institutions FIM million and % of paid pensions 1997

	Earnings-related pension acts								**Self-employed persons**				**Total**	
	TEL		LEL		TaEL		MEL		YEL		MYEL			
	FIM	%	FIM	%	FIM	%	FIM	%	FIM	%	FIM	%	FIM	%
1997	785	2.3	90	0.3	9	0.0	16	0.1	139	0.4	103	0.3	1 142	3.4

Source: The Ministry of Social Affairs and Health